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JURISDICTION PROFILE

OVERVIEW

The Town of South Bristol is in Ontario County, New York, with a population of over 1,600. The town is in the southwestern part of the county and claims to be the smallest town (by population) in the county. According to the United States Census Bureau, the town has a total area of 42.0 square miles of which 39.1 square miles is land and 3.0 square miles is water. The eastern town line, marked by Canandaigua Lake, is the border of Yates County. North-south highways, NY 21 and NY 64 intersect in Bristol Springs. Mud Creek and Mill Creek form deep northsouth valleys in the town. Figure X-1 shows the general location of the Town of South Bristol.

TOWN OF SOUTH BRISTOL **CONTACT INFORMATION**

Name: Daniel Marshall Title: Town Supervisor

Phone: (585) 374-6341

Address: 6774 County Road 12, Naples NY

14512

Email: Daniel.marshall@southbristolny.org

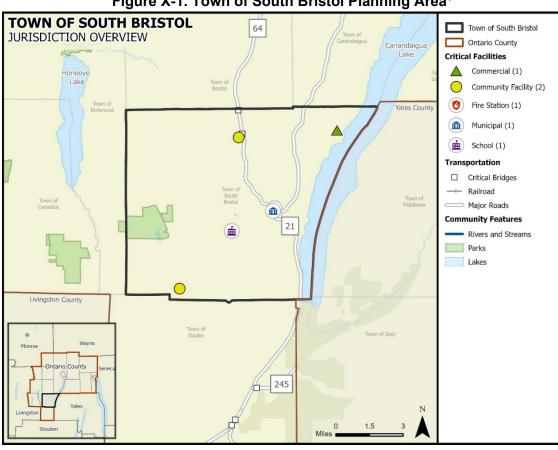


Figure X-1. Town of South Bristol Planning Area¹

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 South Bristol has an official population of 1,641 residents, a 3.2 percent increase since the 2010 census. Table X-1 summarizes select characteristics of vulnerable or sensitive populations in the Town of South 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.

	TOTAL 2010	TOTAL 2021	DEDCENTACE	ESTIMATED VULNERABL SENSITIVE POPULATION		
JURISDICTION	POPULATION	POPULATION	PERCENTAGE CHANGE	Youth (Under 5)	Elderly (Over 65)	Below Poverty Level
Town of South Bristol	1,641	1,727	5.24%	38	539	124

Table X-1. Population Distribution for the Town of South Bristol

POPULATION GROWTH

The official 2020 Town of South Bristol population is 1,641. Overall, the Town of South Bristol experienced a decrease in population between 1990 and 2020 of 1.3 percent, or a decrease by 22 residents. Between 2010 and 2020, the Town of South Bristol experienced a population growth. Table X-2 provides historic change rates in the Town of South Bristol.

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

JURISDICTION	1990⁵	2000 ⁶	2010	2020	POP CHANGE 1990- 2020	PERCENT OF CHANGE	POP CHANGE 2010- 2020	PERCENT OF CHANGE
Town of South Bristol	1,663	1,645	1,590	1,641	-22	-1.3%	51	3.2%

FUTURE DEVELOPMENT

To better understand how future growth and development in the Town of South 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://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 X-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) 644 107,931 167.59 111.349 172.90 114.374 177.60 114,770 178.21

Table X-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 X-4 indicates the department and title of the party responsible for Plan monitoring, evaluating, updating, and review of the Plan.

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

JURISDICTION	TITLE
Town of South 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 South Bristol's website. A total of four surveys were completed for the Town of South

-

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

Bristol. Additional 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 South 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

HAZARD DESCRIPTION, LOCATION, EXTENT, & HISTORICAL OCCURRENCES

The Ontario County Hazard Mitigation Plan Update provides a hazard description, location, and extent of the dam failure hazard for each participating jurisdiction impacted by dam failure (Section 5). The National Dam Safety Review Board (in coordination with FEMA) and the National Inventory of Dams (NID) lists a total of 10 dams in the entire Ontario County planning area, including all jurisdictions. Each of these dams were analyzed individually by location, volume, elevation, and condition (where available) when determining the risk, if any, for each dam. Each dam site was further analyzed for potential risks utilizing FEMA's National Flood Hazard Layer to map locations and fully understand development near the dam and topographical variations that may increase risk. Based on the detailed analysis, the planning team was able to determine that only 1 of the 10 dams identified pose a risk to the Town of South Bristol.

Table X-5. Town of South Bristol Dam Survey8

LOCATIONS AT RISK	DAM NAME	HEIGHT (Ft.)	MAX STORAGE (Acre Ft.)	CONDITION	HAZARD CLASSIFICATION
Town of South Bristol	Ontario Park Dam	20	19	Not Rated	High

Ontario Park Dam

The Ontario Park Dam is located in the Ontario County Park at Gannett Hill, which is to the west of Canandaigua Lake. The dam was constructed in 1966 and is owned by Ontario County and operated for the primary purpose of recreation. In the event of a breach during extreme conditions, a dam failure could cause limited infrastructure damage, minor power outages and could disrupt utility systems. The area within a 1-mile radius of the dam is rural with limited development. A breach of the Ontario Parks Dam would travel east towards Canandaigua Lake, 2.7 miles downhill. Approximately 11 residential structures, 11 highway culverts, 7 public highways would be impacted and may result in damages. One of the residential structures would be in a high hazard situation if there was a breach.9 In the event of a breach, it is estimated that the average breach width would be 41.9 feet with a maximum breach flow of 2,746 cubic feet per second according to the National Weather Service (NWS) Dam Break Equation. A dam breach could result in an estimated depth of up to 10-15 feet, with the highest depth in the immediate area of the dam.

Dam failure presents a moderate threat for the Town of South Bristol due to the dam's limited capacity. Loss of life is possible due to the location of one residential structure in the inundation area. Some infrastructure and utilities could be impacted. Economic loss would be minimal.

There are no reported dam failure events or other dam incidents recorded during the reporting period. While the Town of South Bristol is profiling dam failure, there are no known incidents, events, or damages as a result of dam failure in the planning area.

⁸ National Inventory of Dams

Ontario Parks Dam Emergency Action Plan, Ontario County Department of Public Works, October 24, 2020.

PROBABILITY OF FUTURE EVENTS

Based on historical occurrences of dam failures, the probability for future events is "Unlikely" for the Town of South Bristol, meaning an event is possible in the next ten years.

VULNERABILITY AND IMPACT

The Town of South 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. Impacts to critical facilities located in estimated inundation zones are listed in Section 5.

Table X-6. Critical Facilities Vulnerable to Dam Failure Events

JURISDICTION	CRITICAL FACILITIES			
Town of South Bristol	1 Commercial Building, 1 Community Facility, 4 Recreation			
TOWIT OF SOURT Briston	Facilities/Parks, 2 Fire Stations, 1 Municipal Building, 1 School			

Flooding is the most prominent effect of dam failure. If the dam failure is extensive, a large amount of water would enter the downstream waterways forcing them out of their banks. There may be significant environmental effects, resulting in flooding that could disperse debris and hazardous materials downstream that can damage local ecosystems. If the event is severe, debris carried downstream can block traffic flow, cause power outages, and disrupt local utilities.

Annualized loss-estimates for dam failure are not available; neither is there a breakdown of potential dollar losses for critical facilities, infrastructure and lifelines, or hazardous-materials facilities. Historically, the overall severity of impact from a dam failure for the Town of South Bristol would be considered "Limited," meaning it could result in injuries that can be treated with first-aid, critical facilities being shut down for 24-hours or less and less than 10 percent of the property in the estimated breach inundation area destroyed or with major damage.

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 South 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 South 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 South 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 South 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 Section 6. The following critical facilities would be vulnerable to drought events in the Town of South Bristol:

Table X-7. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES			
Town of South Bristol	1 Commercial Building, 1 Community Facility, 4 Recreation			
TOWITOI SOULII BIISIOI	Facilities/Parks, 2 Fire Stations, 1 Municipal Building, 1 School			

The population over 65 in the Town of South Bristol is estimated at 31 percent of the Town's total population and children under the age of 5 are estimated at 2 percent, or an estimated total of 577 potentially vulnerable residents in the Town of South Bristol based on age. In addition, an estimated 7 percent of the Town of South Bristol's population live below the poverty level (Table X-8).

Table X-8. Populations at Greater Risk

JURISDICTION	POPULATION 65 AND OLDER	POPULATION UNDER 5	POPULATION BELOW POVERTY LEVEL
Town of South Bristol	539	38	124

Historic events and losses are reported on a county-wide basis. All existing and future buildings, facilities, and populations are exposed to this hazard and could potentially be impacted. 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. 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 South 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 South Bristol can expect to experience an extreme cold event approximately once a 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 South 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 South Bristol planning team members identified the following critical facilities (Table X-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 cold impacts to critical facilities are similar across the entire planning area and are listed in detail in Section 7. The following critical facilities would be vulnerable to extreme cold events in the Town of South Bristol:

Table X-9. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES			
Town of South Bristol	1 Commercial Building, 1 Community Facility, 4 Recreation			
TOWIT OF SOURT Briston	Facilities/Parks, 2 Fire Stations, 1 Municipal Building, 1 School			

The population over 65 in the Town of South Bristol is estimated at 31 percent of the Town's total population and children under the age of 5 are estimated at 2 percent, or an estimated total of 577 potentially vulnerable residents in the Town of South Bristol based on age. In addition, an estimated 7 percent of the Town of South Bristol's population live below the poverty level (Table X-10).

Table X-10. Populations at Greater Risk

JURISDICTION	POPULATION 65 AND OLDER	POPULATION UNDER 5	POPULATION BELOW POVERTY LEVEL
Town of South Bristol	539	38	124

Historic losses are often 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 South 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 South Bristol can expect to experience an extreme heat event approximately once a 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 South 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 South Bristol planning team members identified the following critical facilities (Table X-11) 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 Section 8. The following critical facilities would be vulnerable to extreme heat events in the Town of South Bristol:

Table X-11. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES			
Town of South Bristol	1 Commercial Building, 1 Community Facility, 4 Recreation			
TOWIT OF SOURT BIISTOF	Facilities/Parks, 2 Fire Stations, 1 Municipal Building, 1 School			

The population over 65 in the Town of South Bristol is estimated at 31 percent of the Town's total population and children under the age of 5 are estimated at 2 percent, or an estimated total of 577 potentially vulnerable residents in the Town of South Bristol based on age. In addition, an estimated 7 percent of the Town of South Bristol's population live below the poverty level (Table X-12).

Table X-12. Populations at Greater Risk

JURISDICTION	POPULATION 65 AND OLDER	POPULATION UNDER 5	POPULATION BELOW POVERTY LEVEL
Town of South Bristol	539	38	124

Historic losses are often 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 South Bristol, some areas feature flood hazard boundary maps only with no flood elevations. The location of estimated flood zones for the Town of South Bristol, based on the Digital Flood Insurance Rate Maps (DFIRM) from FEMA is illustrated in Figure X-2.

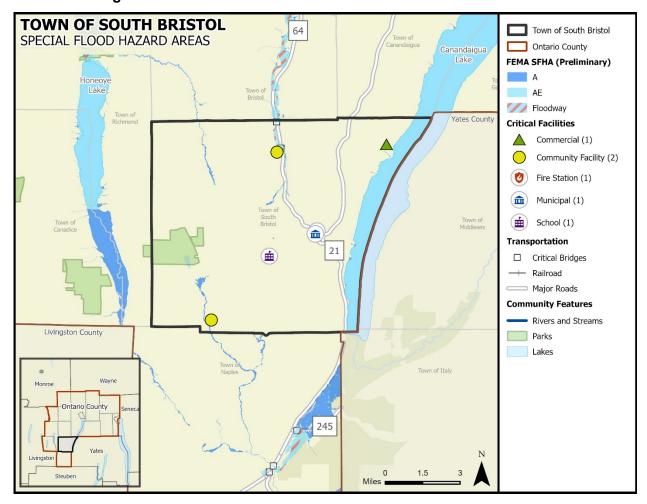


Figure X-2. Estimated Flood Zones in the Town of South Bristol¹⁰

HISTORICAL OCCURRENCES

Table X-13 provides the historical occurrences of flood events for the Town of South 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 South Bristol, based upon NCEI records. Flood

¹⁰ Map sources: ESRI OpenStreetMap (Custom: no labels), Census TIGER/LINE (2022), Ontario County Information Technology Department (2023), Ontario County Preliminary Flood Data (2023)

events are often reported on a county-wide basis, or under-reported for individual municipalities, particularly in smaller communities.

Table X-13. Historical Flood Events, 1996-2023¹¹

JURISDICTION	DATE	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
	1/8/1998	0	0	\$27,491	\$0
Town of South	1/8/1998	0	0	\$1,833	\$0
Bristol	1/8/1998	0	0	\$1,833	\$0
	6/29/2005	0	0	\$38,068	\$0
Tota	ls	0	0	\$69,255	\$0

Based on the list of historical flood events for the Town of South Bristol, none 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 South Bristol can expect to experience approximately two to three flood events every year. This frequency supports a "Highly Likely" probability of future events.

VULNERABILITY AND IMPACT

The Town of South 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. No identified critical facilities in the Town of South Bristol were located in the floodplain. Historic loss estimates due to flood are presented in Table X-14 below.

Table X-14. Potential Annualized Losses, 1996-2023¹²

JURISDICTION	NUMBER OF EVENTS	PROPERTY & CROP LOSS	ANNUAL LOSS ESTIMATES
Town of South Bristol	4	\$69,225	\$2,517

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 South Bristol's population live below the poverty level (Table X-15). 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.

¹¹ Events are reported from January 1996 through August 2023; values are in 2023 dollars.

¹² Historical events are reported from January 1996 through August 2023; values are in 2023 dollars.

Table X-15. Populations at Greatest Risk

JURISDICTION	POPULATION BELOW POVERTY LEVEL	
Town of South Bristol	124	

The severity of a flooding event varies depending on the relative risk to citizens and structures located within each jurisdiction. Table X-16 depicts the level of impact for the Town of South Bristol.

Table X-16 Town of South Bristol Impact

JURISDICTION	IMPACT	DESCRIPTION
Town of South Bristol	Limited	It is anticipated that the Town could anticipate an impact of "limited" with critical facilities shut down for a week or less, and less than 10 percent of property would be destroyed or damaged.

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) PARTICIPATION

The Town of South 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 South Bristol has developed mitigation actions that relate to NFIP participation, maintenance or compliance. Flooding was identified by the Town of South Bristol as a moderate-risk 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 South Bristol Code Enforcement 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 X-17 provides the most recent CAC/CAV dates along with the current status for the jurisdiction.

Table X-17. Compliance History

JURISDICTION	DATE OF LAST	DATE OF LAST	CURRENT NFIP	POLICIES IN
	CAC	CAV	STATUS	FORCE
Town of South Bristol	N/A	6/22/2020	Good Standing	0

REPETITIVE LOSS

Table X-18 shows repetitive loss and severe repetitive loss properties for the Town of South Bristol.

Table X-18. Repetitive Loss and Severe Repetitive Loss Properties

JURISDICTION	BUILDING TYPE	NUMBER OF LOSSES
Town of South Bristol	Single Family	2

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 X-3 demonstrates that the Town of South Bristol is vulnerable to hail events overall. Historical events with reported damages, injuries, or fatalities are shown in Table X-19. One reported historical hail event impacted the Town of South Bristol between January 1956 through August 2023; this event was 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 South Bristol with latitude and longitude available were plotted (Figure X-3).

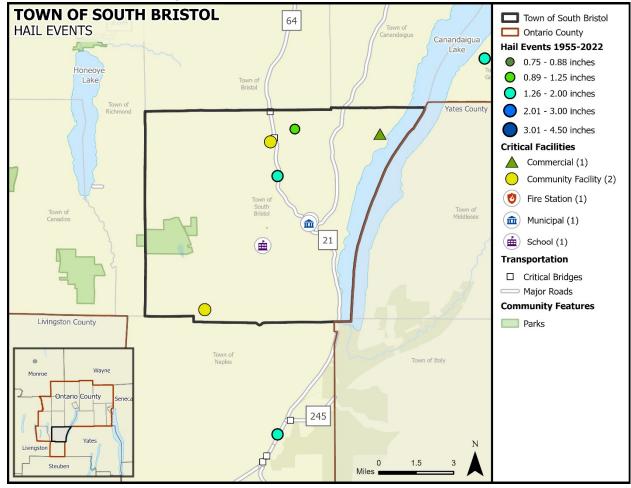


Figure X-3. Historical Hail Events, 1956-2023¹³

¹³ Map sources: ESRI OpenStreetMap (Custom: no labels), Census TIGER/LINE (2022), Ontario County Information Technology Department (2023), NOAA Storm Events Database (2023)

Table Y-10	Historical	Hail Events	1956-2023 ¹⁴
Table A-19.	nistoricai	nan ⊑vents.	1900-2023

JURISDICTION	DATE	MAGNITUDE (Inches)	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
Town of South Bristol	5/29/2012	1	0	0	\$6,444	\$6,444
TOTALS		(MAX EXTENT)	0	0	\$6,444	\$6,444

Based on the list of historical hail events for the Town of South 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 South Bristol can expect a hail event approximately once a year. This frequency supports a "Highly Likely" probability of future events.

VULNERABILITY AND IMPACT

The Town of South 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 Section 10.

Table X-20. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES				
Town of South Bristol	1 Commercial Building, 1 Community Facility, 4 Recreation				
TOWIT OF SOURT Bristor	Facilities/Parks, 2 Fire Stations, 1 Municipal Building, 1 School				

According to the American Community Survey (ACS) five-year estimates for 2021, a total of 29 manufactured homes are in the Town of South Bristol (2 percent of total housing stock). In addition, 51 percent (approximately 701 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 hail events.

Table X-21. Structures at Greater Risk

JURISDICTION	SFR STRUCTURES BUILT BEFORE 1980	MANUFACTURED HOMES
Town of South Bristol	701	29

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 stay away from home, and to rebuild or repair their homes. An estimated 7 percent of the Town of South Bristol's population live below the poverty level (Table X-22).

¹⁴ 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.

Table X-22. Populations at Greatest Risk

JURISDICTION	POPULATION BELOW POVERTY LEVEL	
Town of South Bristol	124	

Overall, the total loss estimate of property and crops in the Town of South Bristol is \$12,888 with an average annualized loss of \$191. Based on historic loss and damages, the impact of hail damages on the Town of South 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 X-23. Estimated Annualized Losses

JURISDICTION	TOTAL PROPERTY & CROP LOSS	ANNUAL LOSS ESTIMATE
Town of South Bristol	\$12,888	\$191

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 South Bristol, are often 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 South 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 South 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 South Bristol planning team members identified the following critical facilities (Table X-24) 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 Section 11. The following critical facilities would be vulnerable to ice storm events in the Town of South Bristol:

Table X-24. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES			
Town of South Bristol	1 Commercial Building, 1 Community Facility, 4 Recreation			
TOWIT OF SOURT Briston	Facilities/Parks, 2 Fire Stations, 1 Municipal Building, 1 School			

The population over 65 in the Town of South Bristol is estimated at 31 percent of the Town's total population and children under the age of 5 are estimated at 2 percent, or an estimated total of 577 potentially vulnerable residents in the Town of South Bristol based on age. In addition, an estimated 7 percent of the Town of South Bristol's population live below the poverty level (Table X-25).

Table X-25. Populations at Greater Risk

JURISDICTION	POPULATION 65 AND OLDER	POPULATION UNDER 5	POPULATION BELOW POVERTY LEVEL
Town of South Bristol	539	38	124

Historic losses are often 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 South 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.

PROBABILITY OF FUTURE EVENTS

Based on available records of historic events there are no known historic events of landslide in the Town of South 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 South 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 South 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 South Bristol is considered "Highly Likely", or an event probable in the next year. The planning team stated that lightning occurs regularly in the area.

VULNERABILITY AND IMPACT

The Town of South 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 Section 13.

Table X-26. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES		
Town of South Bristol	1 Commercial Building, 1 Community Facility, 4 Recreation		
TOWN OF SOUTH Briston	Facilities/Parks, 2 Fire Stations, 1 Municipal Building, 1 School		

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 South Bristol's population live below the poverty level (Table X-27).

Table X-27. Populations at Greatest Risk

JURISDICTION	POPULATION BELOW POVERTY LEVEL	
Town of South Bristol	124	

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 South Bristol due to lightning are considered negligible.

Table X-28. Potential Annualized Losses

JURISDICTION	TOTAL PROPERTY & CROP LOSS	ANNUAL LOSS ESTIMATE
Town of South 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 South 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 South 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 South 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 South Bristol planning team members identified the following critical facilities (Table X-29) 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 Section 14. The following critical facilities would be vulnerable to snow storm events in the Town of South Bristol:

Table X-29. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES			
Town of South Bristol	1 Commercial Building, 1 Community Facility, 4 Recreation			
TOWIT OF SOURT Briston	Facilities/Parks, 2 Fire Stations, 1 Municipal Building, 1 School			

The population over 65 in the Town of South Bristol is estimated at 31 percent of the Town's total population and children under the age of 5 are estimated at 2 percent, or an estimated total of 577 potentially vulnerable residents in the Town of South Bristol based on age. In addition, an estimated 7 percent of the Town of South Bristol's population live below the poverty level (Table X-30).

Table X-30. Populations at Greater Risk

JURISDICTION	POPULATION 65 AND OLDER	POPULATION UNDER 5	POPULATION BELOW POVERTY LEVEL
Town of South Bristol	539	38	124

Historic losses are often 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 X-31 provides the historical occurrences of tornado events for the Town of South Bristol according to the National Centers for Environmental Information (NCEI) Storm Events database. From August 1994 through August 2023, one tornado event is known to have impacted the Town of South Bristol, based upon NCEI records.

Table X-31. Historical Tornado Events, 1994-2023¹⁵

JURISDICTION	DATE	MAGNITUDE	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
Town of South Bristol	6/22/1996	F1	0	0	\$94,503	\$28,351
TOTALS		(MAX EXTENT)	0	0	\$94,503	\$28,351

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

PROBABILITY OF FUTURE EVENTS

With one historical tornado event over a 29-year reporting period, the Town of South Bristol can anticipate a tornado touchdown approximately once every five years. This frequency supports an "Occasional" probability of future events.

VULNERABILITY AND IMPACT

The Town of South 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 Section 15.

Table X-32. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES		
Town of South Bristol	1 Commercial Building, 1 Community Facility, 4 Recreation		
TOWIT OF SOURT Bristor	Facilities/Parks, 2 Fire Stations, 1 Municipal Building, 1 School		

According to the American Community Survey (ACS) five-year estimates for 2021, a total of 29 manufactured homes are in the Town of South Bristol (2 percent of total housing stock). In addition, 51 percent (approximately 701 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.

¹⁵ Historical events are reported from August 1994 through August 2023. Magnitude is listed when available. Damage values are in 2023 dollars.

Table X-33. Structures at Greater Risk

JURISDICTION	SFR STRUCTURES BUILT BEFORE 1980	MANUFACTURED HOMES
Town of South Bristol	701	29

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 South Bristol's population live below the poverty level (Table X-34).

Table X-34. Populations at Greatest Risk

JURISDICTION	POPULATION BELOW POVERTY LEVEL	
Town of South Bristol	124	

The total loss estimate due to tornado events is \$122,854 (in 2023 dollars), having an approximate annual loss estimate of \$4,236. Based on historic damages and best available data the impact of a tornado event on the Town of South 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 X-35. Estimated Average Annual Losses

JURISDICTION	TOTAL PROPERTY & CROP LOSS	AVERAGE ANNUAL LOSS ESTIMATES
Town of South Bristol	\$122,854	\$4,236

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 X-4). The Town of South Bristol planning area is considered at low risk for wildfires with limited WUI areas.

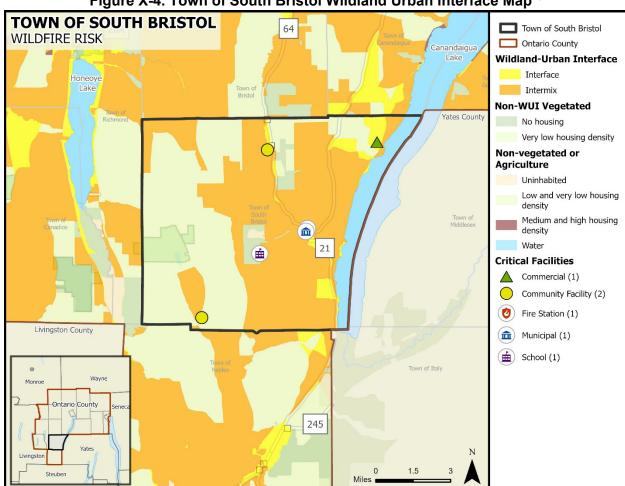


Figure X-4. Town of South Bristol Wildland Urban Interface Map¹⁶

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 of Forest Protection issues color coded danger alerts. The entire planning area, including the

¹⁶ Map sources: ESRI OpenStreetMap (Custom: no labels), Census TIGER/LINE (2022), Ontario County Information Technology Department (2023), USGS ScienceBase Catalog (2022)

Town of South 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 X-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 the County have experienced incidents greater than 10 acres. The Town of South Bristol planning area can anticipate limited future wildfire events, burning less than 10 acres.

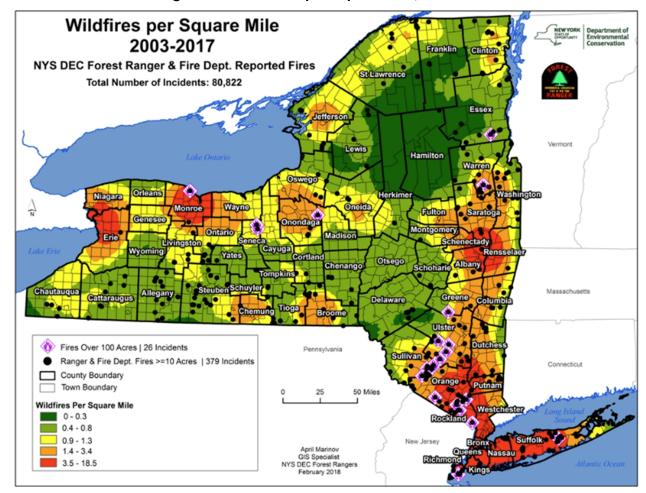


Figure X-5. Wildfires per Square Mile, 2003-2017

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 participating jurisdictions, is "Highly Likely" meaning an event is probable within the next year.

VULNERABILITY AND IMPACT

The Town of South 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 Section 16.

Table X-36. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES									
Town of South Bristol	1 Commercial Building, 1 Community Facility, 4 Recreation									
TOWIT OF SOULT Bristor	Facilities/Parks, 2 Fire Stations, 1 Municipal Building, 1 School									

For the Town of South 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 are considered similar for all participating jurisdictions throughout the planning area.

HISTORICAL OCCURRENCES

Since 1956, three wind events are known to have occurred in the Town of South Bristol. Table X-37 presents information on known historical wind events impacts The Town according to the NCEI Database.

JURISDICTION DATE		JURISDICTION DATE MAGNITUDE DEATHS INJU				
	5/29/2012	50	0	0	\$12,887	\$12,887
Town of South Bristol	8/16/2022	51	0	0	\$514	\$0
	8/29/2022	51	0	0	\$2,188	\$0
TOTALS	(MAX	0	0	\$15,589	\$12,887	

Table X-37. Historical Wind Events, 1956-2023¹⁷

Based on the list of historical thunderstorm wind events for the Town of South Bristol, two of the events have occurred since the 2018 Plan.

PROBABILITY OF FUTURE EVENTS

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 South Bristol can expect to experience a wind event four to five times a year. This frequency supports a "Highly Likely" probability of future events.

VULNERABILITY AND IMPACT

The Town of South 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 wind events. Wind impacts to critical facilities are similar across the entire planning area and are listed in detail in Section 17.

Table X-38. Critical Facilities at Risk

JURISDICTION	CRITICAL FACILITIES								
Town of South Bristol	1 Commercial Building, 1 Community Facility, 4 Recreation Facilities/Parks, 2 Fire Stations, 1 Municipal Building, 1 School								

According to the American Community Survey (ACS) five-year estimates for 2021, a total of 29 manufactured homes are in the Town of South Bristol (2 percent of total housing stock). In

¹⁷ Historical events are reported from January 1956 through August 2023. Magnitude is listed when available. Damage values are in 2023 dollars.

addition, 51 percent (approximately 701 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 wind events.

Table X-39. Structures at Greater Risk

JURISDICTION	SFR STRUCTURES BUILT BEFORE 1980	MANUFACTURED HOMES
Town of South Bristol	701	29

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 South Bristol's population live below the poverty level (Table X-40).

Table X-40. Populations at Greatest Risk

JURISDICTION	POPULATION BELOW POVERTY LEVEL				
Town of South Bristol	124				

Impact of wind events experienced in the Town of South 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 \$28,476 in damages (in 2023 dollars) in the Town of South Bristol due to wind events. The estimated average annual loss from a wind event is \$423.

Table X-41. Estimated Annualized Losses

JURISDICTION TOTAL PROPERTY & CR		ANNUAL LOSS ESTIMATES
Town of South Bristol	\$28,476	\$423

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 manmade hazards evaluated for this plan.

PREVIOUS MITIGATION ACTIONS

Previous Action Worksheet									
TSE	3-1: Aquatic Invasive Species Mitigation								
Name of Jurisdiction: Name of Haz. Mit. Plan:	Town of South Bristol Ontario County Multi-Jurisdictional Hazard Mitigation Plan – 2015								
Tunio oi riuz. mit. i iun.	Risk / Vulnerability								
Problem being Mitigated:	Aquatic invasive species issue on Canandaigua Lake - funding is limited - need: information/education programs; watercraft stewards/inspection and organism removal; boat washing stations								
Potential Acti	ons/Projects (not being Implemented at this time)								
Actions/Projects Considered with Summary Evaluation of Each:	Aquatic invasive species on Canandaigua Lake.								
	on or Project Intended for Implementation								
Action/Project Number: Name of Action or Project:	TSB-1: Aquatic Invasive Species Mitigation								
Action or Project Description:	Boat washing, education, inspection of organisms in lake and prevention								
Summary of Evaluation Benefits (losses avoided): Estimated Cost: Other Factors Considered:	Public health concerns. Minimize potential damage to resources on which the recreation and tourism industry depend. \$10,000 education materials \$100,000— hire boat inspectors (if need be) \$40,000— set up boat washing stations (if need be)								
	Plan for Implementation								
Responsible Organization:	Town Parks and Recreation Department,								
Action/Project Priority:	High								
Timeline for Completion:	2020								
Potential Fund Sources:	NYS DEC								
Local Planning Mechanisms to be Used in Implementation, if any:	Coordination with the Canandaigua Lake Watershed Council with support from Finger Lakes Partnership for Regional Invasive Species Management (PRISM)								
D-tf-Ot-t	2024 Analysis								
Date of Status Report: Report of Progress: Evaluation of Effectiveness:	Delete Action. Town does not face this issue.								

Previous Action Worksheet									
TSB-2: Flood M	itigation – regulations and stormwater management								
Name of Jurisdiction:	Town of South Bristol Ontario County Multi-Jurisdictional Hazard Mitigation Plan – 2015								
Name of Haz. Mit. Plan:	Risk / Vulnerability								
Problem being Mitigated:	Drainage/flood issues - flooding has caused road closures, damage to homes and structures, etc.; lost a road last year – issues with drainage on Bulic Rd culverts; NY rte. 21 has been damaged; some future development is anticipated adjacent to the flood zone on Canandaigua Lake-ensure development adheres to flood regs.								
Potential Acti	ons/Projects (not being Implemented at this time)								
Actions/Projects Considered with Summary Evaluation of Each:	state also property damage.								
	on or Project Intended for Implementation								
Action/Project Number: Name of Action or Project:	TSB-2: Flood Mitigation – regulations and stormwater management								
Action or Project Description:	Review flood impacts and assess need for culvert replacement and ditch and drainage improvements								
Summary of Evaluation Benefits (losses avoided): Estimated Cost: Other Factors Considered:	Reduction of road damage and property damage Phase 1 study of culvert resizing needs estimated \$50,000 Impact on Emergency Response Time								
	Plan for Implementation								
Responsible Organization:	Highway Department								
Action/Project Priority:	High								
Timeline for Completion:	2023								
Potential Fund Sources:	Town Budget, NYS DEC, Wildlife and Fisheries								
Local Planning Mechanisms to be Used in Implementation, if any:	N/A								
	2024 Analysis								
Date of Status Report: Report of Progress: Evaluation of Effectiveness:	Defer to Plan Update. Culvert replacements are on-going and being addressed by the Highway Department.								

Previous Action Worksheet									
TSB	-3: Stormwater and erosion management								
Name of Jurisdiction: Name of Haz. Mit. Plan:	Town of South Bristol Ontario County Multi-Jurisdictional Hazard Mitigation Plan – 2015								
Risk / Vulnerability									
Problem being Mitigated:	Stormwater management and erosion concerns - need adequate equipment and to continue road ditch stabilization, culvert repair/replacement, tree trimming.								
Potential Actions/Projects (not being Implemented at this time)									
Actions/Projects Considered with Summary Evaluation of Each:	Stormwater and erosion management								
	on or Project Intended for Implementation								
Action/Project Number: Name of Action or Project:	TSB-3: Stormwater and erosion management								
Action or Project Description:	Purchase new equipment, ditch maintenance with culvert replacement.								
Summary of Evaluation Benefits (losses avoided): Estimated Cost: Other Factors Considered:	Highway damage and road closures \$100,000 Timely emergency response								
	Plan for Implementation								
Responsible Organization:	Highway Department								
Action/Project Priority:	High								
Timeline for Completion:	2023								
Potential Fund Sources:	Highway Department, Bonds and Town Board								
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain management plan								
	2024 Analysis								
Date of Status Report: Report of Progress: Evaluation of Effectiveness:	Completed. Slope law is in place with Town.								

Previous Action Worksheet										
TSB-4: Town Hall and Highway Dept. Generators										
Name of Jurisdiction:	Town of South Bristol									
Name of Haz. Mit. Plan:	Ontario County Multi-Jurisdictional Hazard Mitigation Plan – 2015									
Risk / Vulnerability										
Problem being Mitigated:	Some critical facilities are vulnerable to utility failure (and associated hazards that can cause utility failure) - Town hall and town garage need generators.									
Potential Actions/Projects (not being Implemented at this time)										
Actions/Projects Considered with Summary Evaluation of Each:	Vulnerability of highway garage and town hall to utility failure.									
Actio	on or Project Intended for Implementation									
Action/Project Number: Name of Action or Project:	TSB-4: Town Hall and Highway Dept. Generators									
Action or Project Description:	Install two generators: one at Town Hall and one at Highway Dept.									
Summary of Evaluation Benefits (losses avoided): Estimated Cost: Other Factors Considered:	No down time for either Highway or Town Hall daily business. Backup generators will limit damage by ensuring that sump pumps and heaters work during 500yr flood events. \$40,000-\$50,000 per location Towns infrastructure can continue to run									
	Plan for Implementation									
Responsible Organization:	Town Board									
Action/Project Priority:	High									
Timeline for Completion:	2018									
Potential Fund Sources:	Town Budget and Government Grants									
Local Planning Mechanisms to be Used in Implementation, if any:	Annual Budgeting Process									
Detect 04-4	2024 Analysis									
Date of Status Report: Report of Progress: Evaluation of Effectiveness:	Defer to Plan Update.									

NEW MITIGATION ACTIONS

	TOWN OF SOUTH 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.													
1	Froject # 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 1	11.4	Failure, Extreme Cold, Extreme Heat, Flood, Hail, Ice Storm, Lightning, Snow Storm Tornado, Wildfire, Wind, and	equipment/machinery. The operations are basically brought to a halt. The Town	Acquire and install a permanent generator at both critical facilities: Town Hall and Highway Department	Yes	Further review required	24-40 months	Town Board and Highway Department	\$40,000- \$50,000 per location	Provide power for critical facilities during power outages and ensure continuity of critical services.	Local Department Budget; HMGP, BRIC, CDBG, PA 406 (when applicable) local bonds	Н	Energy (Power/Fuel)
2	2 4		Flood	Flood Mitigation of Gullies: South Bristol is quite hilly, and we have many, many gullies that drain directly into Canandaigua Lake. Most of these gullies are on private property. Over time they fill with obstacles that cause flooding and erosion.	Conduct an assessment to identify flood mitigation projects that could be implemented to reduce erosion and flooding. Work with private property owners on a solution.	No	Further review required	24-48 months	Town Board	Cost determined based on proposed mitigation solutions	Provide power for critical facilities during power outages and ensure continuity of	Local Department Budget; HMGP, BRIC, CDBG, PA 406 (when applicable) local bonds		Safety/Security

	TOWN OF SOUTH 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
3	3.3	Flood	Flood Regulations: There is some future development is anticipated adjacent to the flood zone on Canandaigua Lake in which adherence flood regulations is needed. This project protects infrastructure, reduces cost of reparation, and prevents injury to residents.	development.	No	N/A	On-going	Town Board and Code	Staff Time	Reduce flood damages and risk of injuries or fatalities through regulated development; Reduce the amount of stormwater runoff in densely developed areas during flood events; Reduce the risk of downstream flooding.	HMGP, BRIC, CDBG, PA	Н	Communication, Safety/Security
4	5.4	Flood	Bulic Rd culverts, damage to		No	Further review required	On-going	Town Board and Highway Department	\$500,000	Improve risk assessment; Reduce	Local Department Budget; HMGP, BRIC, CDBG, PA 406 (when applicable) local bonds		Safety/Security
5	3.1	Extreme Heat, Drought	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 tips for avoiding impacts of extreme heat and drought 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 heat advisory warning alerts, water conservation techniques, etc.	No	N/A	12 months	Town Board, Ontario County Emergency Management	Staff Time	Promote hazard awareness and protect residents from potential injuries and damages.	Local Department Budget, Staff time	M	Communication

	TOWN OF SOUTH 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
6	3.1	Cold, Ice Storm, Snow Storm	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 extreme cold, ice storms and snow storms 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 warming stations, install warning signs at hazardous bridges and roadways subject to ice, mitigation measures to prevent frozen pipes ways, 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	^t M	Communication
7	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.	Prepare 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 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	^t M	Communication

TOWN OF SOUTH BRISTOL PROPOSED PROJECTS													
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2 1	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
8	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 surge protectors, tree removal/branch 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
9	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 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	М	Communication

				TOWN OF S	DUT	H BRIST	OL PROP	OSED PROJE	стѕ				
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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
10	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.	ground cover on slopes; build channels or deflection walls to direct		N/A	36 months	Town Board in conjunction with Ontario County Planning and 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
11	3.1	Infestation	Invasive Species: Ontario County is at risk of being infested with invasive species which could cause great economic hardship to the community and storm water management.	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, Ontario County Soil and Water Conservation District and Cooperative Extension		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 SOUTH BRISTOL PROPOSED PROJECTS													
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Project #	Goal / Objective	.=.	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
12	3	F E F S.3 S S S V	Drought, Flood, Landslide, Snow Storm Tornado, Vildfire		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
13	3		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 monoxide alerts, fire extinguishers in home, proper safety tips, etc.	No	N/A	36-60 months	Town Board, ir conjunction with Local Fire Departments	Ctoff Time	Reduce risk to citizens by educating the public on how to prepare for hazards and disasters.	Local Budget	L	Communication
14	3	s.1 T	Terrorism	Public Awareness Program: The general public may not be aware of the risk of potential domestic terrorism that could	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		N/A	36-60 months	Town Board, ir 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

	TOWN OF SOUTH 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
				they have concerns on a potential threat.									
15	3.	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
16	3.	Water Supply Contamin ation	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
17	3.	Dam Failure	Dam Inundation Risk	Identify the area potentially at- risk in the event of dam failure and educate residents at risk on ways they can mitigate and reduce the effects of downstream impacts in the event of inundation.	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	М	Communication

CAPABILITY ASSESSMENT

COMMUNITY CAPABILITY CHECKLIST	Town of South Bristol
PLANS	
Capital Improvements Plan	
Climate Change Adaptation Plan	
Comprehensive/Master/Land Use Plan	
Community Wildfire Protection Plan	
Continuity of Operations	
Drought Contingency Plan	
Economic Development Plan	
Emergency Management Action Plan	
Emergency Operations Plan	
Emergency Response Plan and Pandemic Plan Annex	
Extreme Heat Plan/Protocol	
Evacuation Plan	X
Floodplain Management Plan	
Hazard Mitigation Plan	X
Local Waterfront Revitalization Plan	
Natural Resource Conservation Plan	
Open Space Plan	
Stormwater Management Plan	
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 South Bristol
Fire Codes	Х
Floodplain Ordinance	X
Illicit Discharge Detection and Elimination	
Local Environmental Review	
Local Wetland Regulations	
Public Maintenance of Streets, Bridges, other	Χ
Regulation of Invasive Species	
Regulation for Prevention of Water Contamination	X
Regulation for Unsafe/Defective Structures	X
Sediment and Erosion Control Measures	
Site Plan Review Requirements	Χ
Steep Slope Ordinance	Χ
Stream Buffer Ordinance	X
Stormwater/	
Drainage Ordinance	
Subdivision Regulations	
Timber Harvesting Regulations	X
Tree Protection or Landscaping Ordinance	
Use of Pollutants: Road Salt Use, Fertilizers, Pesticides, etc.	
Wildfire Ordinance	
Winter Road Maintenance	X
Zoning Ordinance/Land Use Restrictions	X
Additional Hazard-Related Regulations or Plans	
PROGRAMS	
Firewise Communities	
Floodplain Maps/Flood Insurance Studies	
Hydraulic Studies	
Mutual Aid Agreement	

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