



Northern Virginia Hazard Mitigation Plan

Annex 17-B: Town of Haymarket

November 2022





Town of Haymarket Overview

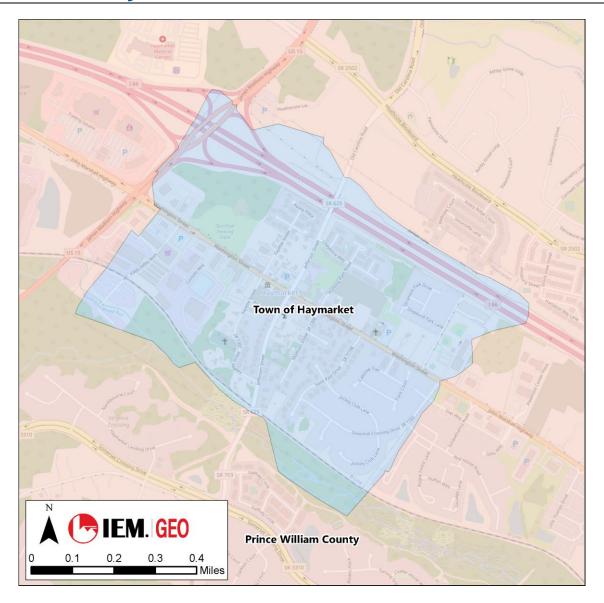


Table 1: Specific Jurisdictional Data

| <u> </u> | | 2020 | EÎÎE GOVERNMENT | A | (MITIGATION |
|--|----------------|--------------------|--|------------|--|
| ESTABLISHED | LAND AREA | 2020 POPULATION | ADDRESS | HOUSEHOLDS | FOCUS |
| Founded in 1799 Incorporated 1888 | 0.5 sq. mi. | 1,545 | 15000 Washington St. #100 Haymarket, VA 20169 | 490 | Severe Storms and Winter Weather |

Town of Haymarket's Risk Environment

The following is an overview of the basis for the details in this annex. The details in the annex and summarized here, lead up to a well-researched mitigation strategy for the community.

Hazard Event History

National Centers for Environmental Information (NCEI),1950-June 2021

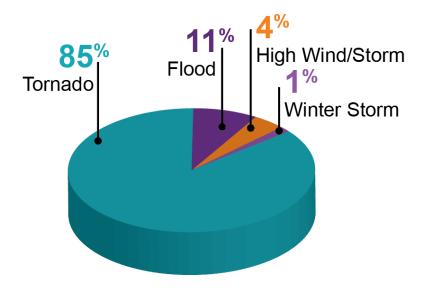


Figure 1: Percentage of Hazards

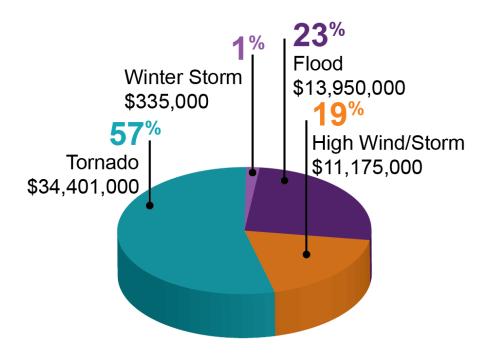


Figure 2: Property Damage Costs from Natural Hazard Events

Natural Hazard Risk Ranking

Table 2: Ranking of Natural Hazards by Risk

| Hazard | Hazard Ranking |
|--------------------------------|-------------------|
| Winter Weather | High |
| Flood/Flash Flood | High |
| High Wind/Severe Storm | High |
| Tornado | Medium |
| Drought | Medium |
| Extreme Temperatures | Medium |
| Dam Failure | Medium |
| Earthquake | Medium |
| Wildfire | Low |
| Landslide | Low |
| Karst/Sinkhole/Land subsidence | Low |

Community Lifelines and Respective Critical Assets

Table 3: Number of Critical Assets for Community Lifelines/Sectors

| Lifeline/Sector | Number of Assets |
|----------------------|------------------|
| Safety and Security | 1 |
| Food, Water, Shelter | 1 |
| Health and Medical | 0 |
| Energy | 0 |
| Communications | 0 |
| Transportation | 12 |
| Hazardous Materials | 0 |
| Education | 3 |
| Cultural/Historical | 4 |
| High Hazard Dams | 0* |

^{*}A portion of the town would potentially be impacted by a failure at the North Fork Wetlands Bank Dam, a High Hazard dam located outside the town limits.

A lifeline enables the continuous operation of government and business functions which are critical for human health, safety, or economic security. Lifelines are the most fundamental services for a community that, when stabilized, enable all other aspects of society to function. These lifelines are assets that may be a facility, infrastructure, operation, or entity.

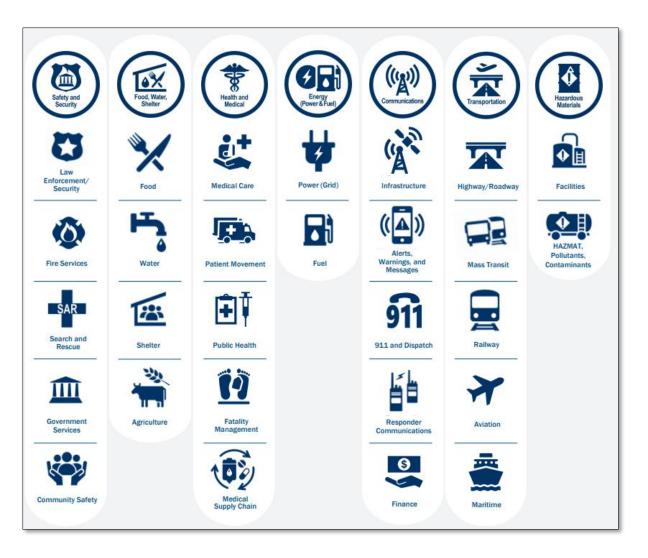


Figure 3: Community Lifeline Components

Community Lifelines Outlined

- Safety and Security: Law Enforcement/Security, Fire Service, Search and Rescue, Government Service, Community Safety
- Food, Water, Shelter: Food, Water, Shelter, Agriculture
- Health and Medical: Medical Care, Public Health, Patient Movement, Medical Supply Chain, Fatality Management
- Energy: Power Grid, Fuel
- **Communications:** Infrastructure, Responder Communications, Alerts Warnings and Messages, Finance, 911 and Dispatch
- Transportation: Highway/Roadway/Motor Vehicle, Mass Transit, Railway, Aviation, Maritime
- Hazardous Materials: Facilities, HAZMAT, Pollutants, Contaminants

Mitigation Capabilities Summary

Table 4: Capability Assessment Summary Ranking, Town of Haymarket

| Capability | Ranking |
|------------------------------|----------|
| Planning and Regulatory | Low |
| Administrative and Technical | Limited |
| Safe Growth | Moderate |
| Financial | Limited |
| Education and Outreach | Limited |

Hazard Mitigation Plan Point of Contact

Table 5: Point of Contact Information

| Contact Type | Contact Information | |
|------------------|------------------------------|--|
| Point of Contact | Al Sibert, Chief | |
| | Haymarket Police Department | |
| | 703-753-2600 | |
| | 530-336-2110 | |
| | asibert@townofhaymarket.org | |
| | 15000 Washington Street #100 | |
| | Haymarket, VA 20169 | |

Town of Haymarket

This annex presents the following jurisdiction-specific information provided by the Town of Haymarket for the 2022 update to the *Northern Virginia Hazard Mitigation Plan (NOVA HMP)*.

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1. Jurisdiction Profile

| Established | 1799 | |
|-------------------------|------------------------|--|
| Total Land Area | 0.5 square miles | |
| Geographic Region | Piedmont/Coastal Plain | |
| Persons Per Household | 3.04 | |
| Persons Per Square Mile | 2,981 | |
| Median Age | 33.7 | |

1.1. Location

Haymarket, Virginia, is a small town located in the foothills of Bull Run Mountain, near the first foothills of the Blue Ridge Mountains. The town is close to the rolling farms of Virginia's "horse country," just west of Manassas and less than an hour away from Washington, D.C.

1.2. History

Chartered in 1799 by the Virginia General Assembly, the Town of Haymarket was incorporated in 1882. Since the 1900s, the Haymarket area has been popular for fox hunting and steeple chasing and is also known for its wineries.

1.3. Demographics, Economy, and Governance

The Northern Virginia regional profile is presented in **Section 1**, **Base Plan** as context to the entire plan. The 2020 U.S. Census population for the Town of Haymarket was 1,545, an approximate 13% decrease since 2010. The town is densely populated with 337 housing units at an average density of 66.1 per square mile. Most of the population lives in single family homes from the central area to the east. The west side of the town is mainly a business district; however, there are some apartments located over commercial stores along Washington Street.

Year **Population Annual Percent Change** 1980 230 1990 466 102.6% 95.9% 2000 913 2010 1,782 95.2% 2020 1,545 -13.3%

Table 6: Population and Growth Rate

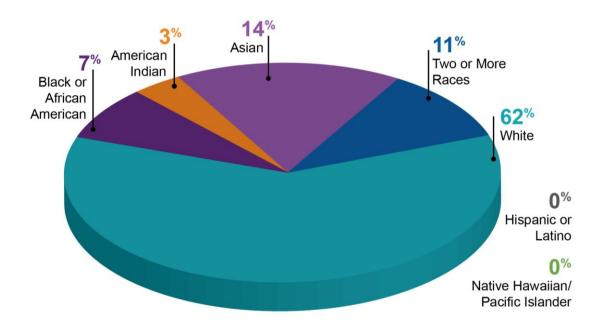


Figure 4: Race and Ethnicity Demographics

Table 7: Economic Data

| Economy | Data |
|---|-----------|
| Median Household Income (in 2020 dollars) 2016–2020 | \$118,958 |
| Unemployment Rate (September 2021) | 2.2% |
| Per Capita Income (in 2020 dollars) 2016–2020 | \$40,336 |
| Median House or Condo Market Value (2019) | \$431,200 |
| Percentage Below Poverty (2019) | 3.7% |

The percentage of Haymarket households below the poverty line is 3.7%, compared to 4.9% for Prince William County and 11.4% nationally. While the trends indicate the population as a whole experiences less poverty than the national average. Major employers for the town include Century Stair Company and Fortiline Waterworks, though each employ less than 100 workers.

The Town Council consists of six elected members (of which one serves as the Vice-Mayor) and an elected mayor. The council appoints a Town Manager, who is responsible for day-to-day operations of the town.

1.4. Built Environment and Community Lifelines

The information related to the county's Community Lifelines and critical assets presented in this section has been collected from multiple sources, including the Town of Haymarket, Hazus (Version 4.2), and county government websites. With the limitations in Hazus, breaking out local data for the town is difficult and may not be fully reflected. Due to the time lag in collecting and verifying data and the method of documenting the location and jurisdiction used in Hazus, this may not reflect the current inventory maintained in the town.

High Hazard Dams

Lifeline/Sector **Number of Assets** Safety and Security 1 Food, Water, Shelter 1 Health and Medical 0 0 Energy Communications 0 **Transportation** 12 Hazardous Materials 0 3 Education Cultural/Historical 4

Table 8: Number of Assets per Community Lifeline/Sector

0*

1.4.1. Safety and Security

The Town of Haymarket has a police department with six full-time officers. Fire and EMS service is provided by Prince William County from stations located outside the town.

1.4.2. Food, Water, Shelter

Food commodities are available in the town from public retail providers, wholesalers, and contracted services for specific institutions and facilities. Should the need arise for the town to enter into memorandums of understanding or mutual agreements with viable entities withing the region to assist with post-disaster needs.

The water and wastewater services are provided to town residents through the Prince William County Service Authority.

The town has 492 housing units, 97% of which are occupied. Most housing units within the town are owner-occupied (82.4%), while renter-occupied housing makes up 17.5%.

1.4.3. Health and Medical

The Haymarket Medical Center (a UVA Health facility) is located across I-66 from the town.

1.4.4. Energy

Dominion Energy is the sole provider of electrical service within the Town of Haymarket

1.4.5. Communications

Most communications and information systems and infrastructure in the United States are privately owned; however, the county maintains authority and control over public safety communications for fire,

^{*}A portion of the town would potentially be impacted by a failure at the North Fork Wetlands Bank Dam, a High Hazard dam located outside the town limits.

police, and other responding agencies, including the Town of Haymarket Police Department. In recent years, the federal government has taken a stronger role in protecting information and communications infrastructure, which may also present a challenge in relation to disaster impacts. Increasing reliance on this infrastructure by individuals, businesses, and government could cause vulnerabilities that emergency managers should take into consideration in pre- and post-incident planning and operations.

1.4.6. Transportation

Haymarket remains a crossroads, located along Interstate 66, U.S. Route 15, and Virginia Route 55. U.S. Route 29 runs south of the town.

1.4.7. Hazardous Materials

The data does not identify hazardous material facility located in the Town of Haymarket. There are several commercial/industrial properties in the western portion of the town which may store small quantities of hazardous materials.

1.4.8. Education

The town is served by the Prince William County School District, though no public schools are located within the town itself. There is 1 private elementary school located in the town.

1.4.9. Recreational, Cultural, and Historic Sites and Assets

The town maintains the Town of Haymarket Park and Playground for recreational purposes. The Haymarket Museum chronicles the history of Haymarket, most of which is itself a historical district, and the surrounding area.

1.4.10. High Hazard Dams

There are no high hazard dams in the town, however the western portions of the town may be impacted by a failure of the North Fork Wetlands Bank Dam, a High Hazard dam located northwest of the town.

1.5. Growth and Development Trends

The town has limited areas for growth due to its existing borders. There are several open areas within the town that could be developed, including along Washington Street (VA-28). Growth may also be infill development with businesses and housing units replacing existing structures, such as the recent redevelopment of property in the center of town that included building a Hilton brand hotel. While the growth trend for the surrounding area within Prince William County is upward, Haymarket will likely see slow and steady growth.

2. Jurisdiction Planning Process

For the 2022 NOVA HMP update, the Town of Haymarket followed the planning process described in **Section 2, Base Plan**. In addition to providing representation to the Northern Virginia Hazard Mitigation Planning Group, the county supported the local planning process requirements by coordinating with representatives from other departments and agencies within its jurisdiction.

Table 9: Local Planning Participants

| Name | Position/Title | Department/Agency |
|-----------|--|-------------------|
| Al Sibert | ibert Police Chief Town of Haymarket Police Department | |

The town identified its chief hazard mitigation planning responsibility as representing the town in coordination with the Prince William representative to the Emergency Manager's Planning Group. The town also identified the following tasks as part of its mitigation planning responsibilities:

- Jurisdictional Planning Committee
- Planning Group resource/subject matter expert
- Hazard risk and vulnerability assessment
- Provide technical data and hazard information
- Capabilities assessment
- Mitigation strategy development
- Sponsor mitigation actions
- · Review Plan drafts and provide input
- Public outreach activities
- Implementation of the plan
- Maintaining the plan

Town planning participants coordinated primarily by means of virtual meetings during the planning process, and as needed, independently to carry out planning activities completed through a series of worksheets that provided background information on the history of hazard events, hazard risks, and vulnerabilities, capabilities, and past mitigation efforts. Additional planning process documentation of the Planning Group meetings is included in the **Base Plan**, **Appendix A**.

2.1. Public Participation

Several opportunities for public involvement were provided during the planning process, including a Public Hazard Survey and access to the draft plan for review and input. These opportunities were placed on the Ready Prince William Facebook page and the Prince William County Emergency Management Twitter account.

In addition to the survey, the public was offered the opportunity to review and provide input to the Draft 2022 Plan update. Notification of the Draft Plan release was made through the same social media accounts. Documentation of the public survey and draft plan review is included in **Attachment 3** of this annex.

3. Jurisdiction Specific Hazard Event History

The Town of Haymarket comprehensive hazard history is part of the Prince William County's history described in **Section 5**, **Base Plan**. The diversity of the landscape increases the vulnerability to a variety of hazards, most notably flooding, severe storms, and winter weather.

The National Oceanic and Atmospheric Administration (NOAA) National Center for Environmental Information (NCEI) Storm Events Database includes 873 recorded natural meteorological events that took place in the county between January 1, 1950, and May 2021. Between 1996 and 2019, the NCEI Storm Events Database recorded 22 natural meteorological events in the Haymarket area. The county has been included in three Federal Disaster Declarations and emergencies between 2017 and May 2021.

Table 10: Federal Disaster and Emergency Declarations, 2017–2021

| Declaration | Date | Hazard | Assistance Type |
|-------------|---------------------------|--------------------|--|
| DR-4512-VA | 4/2/2020 (continuing) | COVD-19 Pandemic | Individual Assistance, Public Assistance |
| EM-3448-VA | 3/13/2020 (continuing) | COVID-19 Pandemic | Public Assistance (Category B) |
| EM-3403-VA | 9/11/2018 | Hurricane Florence | Public Assistance (Category B) |

The Town of Haymarket submitted the following additional details related to significant hazard events since the 2017 plan. For all countywide events, see the **Prince William County Annex**.

Table 11: Town of Haymarket Significant Hazard Events, 2017–2021

| Date | Hazard | Event and Description |
|-----------|--------|--|
| July 2018 | Flood | Rain and heavy precipitation 5.02 inches of rain in 24 hours |

4. Hazard Risk Ranking

After developing hazard profiles, the Town of Haymarket Planning Committee conducted a two-step quantitative risk assessment for each hazard that considered population vulnerability, geographic extent/location, probability of future occurrences, and potential impacts and consequences. The numerical scores for each category were totaled to obtain an Overall Risk Score, which is summarized as one of these risk and vulnerability classifications:

- Low: Two or more criteria fall in lower classifications or the event has a minimal impact on the
 planning area. This rating is sometimes used for hazards with a minimal or unknown record of
 occurrences or for hazards with minimal mitigation potential.
- **Medium:** The criteria fall mostly in the middle ranges of classifications and the event's impacts on the planning area are noticeable but not devastating. This rating is sometimes used for hazards with a high extent rating but very low probability rating. The potential damage is more isolated and less costly than a widespread disaster.
- **High:** The criteria consistently fall in the high classifications and the event is likely/highly likely to occur with severe strength over a significant to extensive portion of the planning area.

The two-step hazard risk ranking methodology is detailed in **Section 4.2**, **Base Plan**. The Hazard Risk Ranking scores for the Town are provided in **Attachment 2** of this annex.

The Overall Risk Score for each hazard served as the basis for determining whether a vulnerability assessment should be conducted. Natural hazard profiles are presented within the hazard sub-sections in **Section 5**, **Base Plan**, and local detail is provided in the jurisdiction annexes. Non-natural hazard profiles are presented in **Volume II of the Base Plan**.

Table 12: Hazard Risk Ranking Summary, Natural Hazards

| Hazard | Total Probability Score | Total Consequence Score | Overall Risk Score | Hazard Ranking |
|--------------------------------|-------------------------------|-------------------------------|-----------------------|-------------------|
| Winter Weather | 3.7 | 3.5 | 7.2 | High |
| Flood/Flash Flood | 1.7 | 4.2 | 5.9 | High |
| High Wind/Severe Storm | 2.7 | 3.2 | 5.9 | High |
| Tornado | 1.3 | 4.3 | 5.6 | Medium |
| Drought | 2.3 | 3.2 | 5.5 | Medium |
| Extreme Temperatures | 3.0 | 2.5 | 5.5 | Medium |
| Dam Failure | 1.0 | 4.1 | 5.1 | Medium |
| Earthquake | 1.7 | 3.2 | 4.9 | Medium |
| Wildfire | 1.0 | 3.0 | 4.0 | Low |
| Landslide | 1.0 | 2.7 | 3.7 | Low |
| Karst/Sinkhole/Land subsidence | 1.0 | 2.5 | 3.5 | Low |

High

Medium

Medium

Low

Low

Total Total **Overall Risk** Hazard Hazard **Probability** Consequence Score Ranking Score Score Infectious Disease 3.0 5.8 8.8 High 1.0 6.4 7.4 High

4.7

5.2

3.9

3.7

3.6

6.7

6.5

5.3

5.0

4.6

Table 13: Hazard Risk Ranking Summary, Non-Natural Hazards

Based on the hazard risk scores, the Town of Haymarket evaluated the level of risk for 18 hazards: 11 natural and 7 non-natural.

Eight natural hazards were identified as high or medium risk hazards to which the jurisdiction is vulnerable:

2.0

1.3

1.3

1.3

1.0

- High: Flood/Flash Flood, High Wind/Severe Storm, and Winter Weather
- Medium: Dam Failure, Drought, Earthquake, Extreme Temperatures, and Tornados

Five non-natural hazards were ranked as high or medium risk:

- High: Infectious Disease, Terrorism, and Cyberattack
- Medium: Civil Unrest and Hazardous Materials

All other hazards are ranked as "low," signifying a minimal risk to the town.

4.1. Additional Hazard Risk Considerations

4.1.1. National Risk Index

Terrorism

Cyberattack

Civil Unrest

Hazardous Materials

Active Violence

Communication Disruption

The National Risk Index (NRI) is a dataset and online tool developed by FEMA and other partners to help illustrate communities in the United States at risk for 18 natural hazards.

Hazard risk is calculated on data for a single hazard type and reflects the relative risk for that hazard type and should be considered only as a baseline relative risk measurement for the purpose of a general comparison with the local hazard risk ranking in the Hazard Risk Ranking section of this annex.

In addition, some hazards are defined differently from the hazards in this plan, so a direct hazard-tohazard comparison of risk is not able to be determined. The NRI is a county-level risk ranking, which includes the towns and is presented in Annex 17: Prince William County, Section 4.1.

4.1.2. Non-Natural Hazards

Volume II of the 2022 Northern Virginia Hazard Mitigation Plan addresses non-natural hazards identified by the town.

5. Vulnerability Assessment

The methodology for calculating loss estimates presented in this annex is the same as that described in **Section 4**, **Base Plan**. Quantitative loss estimates are provided when available. Qualitative measurement considers hazard data and characteristics, including the potential impact and consequences based on past occurrences. Accompanying the data is a discussion of community assets potentially at risk during a hazard event.

The assets at risk were identified during the planning process as potential assets vulnerable to one or more hazards.

5.1. National Flood Insurance Program

The Town of Haymarket is a participant in the National Flood Insurance Program (NFIP).

Init FHBM Identified 08/09/1974

Init FIRM Identified 01/17/1990

Current Effective Map Date 01/05/1995

Reg-Emer Date 01/31/1990

Digital Flood Insurance Rate Map (DFIRM)/(Q3) County Level Available

Table 14: NFIP Status.1

Table 15: NFIP Policy and Claims Status

| Policies In-Force | Unknown |
|-------------------|---------|
| Premiums Paid | Unknown |
| Total Claims | Unknown |
| Total Payment | Unknown |

Other hazard information for the Town of Haymarket is presented in the Base Plan.

5.2. Population

Estimates of the number of residents in Prince William County vulnerable to each hazard are presented in the various hazard sections in the **Base Plan**.

The Centers for Disease Control and Prevention's (CDC) Social Vulnerability Index (SVI) is a tool that can be used to identify specific vulnerable populations.

¹ FEMA NFIP Community Status Report, September 9, 2021

The Overall CDC SVI for Prince William County, including the Town of Haymarket, is presented in Annex 17: Prince William County.

5.3. Built Environment

Based on the best data currently available, the tables presented in this section provide a total number of exposed facilities and properties in relation to earthquake, flood, and hurricane wind.

Vulnerabilities include structures, systems, resources, and other assets defined by the community as susceptible to damage and loss from hazard events. The vulnerability of critical infrastructure is presented within the lifeline sector categories identified by FEMA.

5.4. Community Lifelines and Assets

Prince William County reviewed its community lifelines and assets to identify critical facilities, systems, and infrastructure that have the most significant risks and exposure. Vulnerabilities include structures, systems, resources, and other assets defined by the community as susceptible to damage and loss from hazard events.² The vulnerability of critical infrastructure is presented within the lifeline sector categories identified by FEMA.

Table 16: Vulnerable Community Lifeline Assets (in Thousands of Dollars)³

| Sector | Total Number |
|-----------------------------|-----------------------|
| Safety and Security | Replacement \$ for PD |
| Food, Water, and Sheltering | Undetermined |
| Health and Medical | Undetermined |
| Energy | Undetermined |
| Communications | Undetermined |
| Transportation | |
| Hazardous Materials | Undetermined |

Table 17: Town of Haymarket Critical Facilities Exposed to FEMA identified Floodplains

| Type of Critical Facility | Total Facilities | Located Within the 100-Year Floodplain | Located within the 500-Year Floodplain |
|---------------------------|------------------|--|--|
| Railway segments | 3 | 2 | 3 |
| Highway bridges | 4 | 1 | 1 |
| Highway segments | 5 | 0 | 0 |
| Police stations | 1 | 0 | 0 |
| Total | 13 | 3 | 4 |

² Although Prince William County maintains a separate critical facilities inventory, information used in this analysis is extracted from the Hazus critical facilities database to maintain consistency with other jurisdictions.

³ Source: Hazus – Building Stock Exposure totals reflect data for those census tracts/blocks included in the study region.

5.5. Environment

Information related to environmental vulnerability is presented in the hazard-specific sections of the **Base** Plan.

5.6. Economy

Information related to economic vulnerability are presented in the hazard-specific sections of the **Base Plan**. Specific direct economic losses (in thousands of dollars) related to a 2,500-year 6.5 magnitude earthquake event are identified by Hazus for specific assets and presented in **Annex 17: Prince William County**.

5.7. Cultural/Historical

Information related to the vulnerability of cultural and historical assets are presented in the hazard-specific sections of the **Base Plan**.

The Town of Haymarket is designated as a historic district. Several landmarks in Haymarket are on the National Historic Register of Places as well as locally designated as landmarks.

Historic structures and sites are frequently more vulnerable to flood hazards due to the typical development of a city or town along waterways. Because removing historic structures from their original site affects their historical value, there are challenges to protecting these fragile sites.

6. Capability Assessment

The Town of Haymarket reviewed its legislative and departmental capabilities to identify resources, strengths, and gaps for implementing hazard mitigation efforts. Using a Capabilities Assessment Worksheet, the community documented existing institutions, plans, policies, ordinances, programs, and resources that could be brought to bear on implementing the mitigation strategy. The capabilities in relation to hazard mitigation were assessed in the following categories:

- Planning and regulatory
 - Implementation of ordinances, policies, site plan reviews, local laws, state statutes, plans, and programs that relate to guiding and managing growth and development
- Administrative and technical
 - Town staff and their skills and tools that can be used for mitigation planning and to implement specific mitigation actions
- Safe growth
 - Use of community planning through comprehensive plans as hazard mitigation to increase community resilience
- Financial
 - Resources that a jurisdiction has access to or is eligible to use to fund mitigation actions
- Education and outreach
 - Programs and methods that could be used to implement mitigation activities and communicate hazard related information

6.1. Capability Assessment Summary Ranking and Gap Analysis

The Town of Haymarket ranked the level of capability in relation to each assessment category as a means of identifying where elements could be strengthened or enhanced. Capabilities were ranked on a qualitative basis as demonstrated by the jurisdiction's authorities, programs, plans, and/or resources:

- **Limited:** The jurisdiction is generally unable to implement most mitigation actions.
- Low: The jurisdiction has some capabilities and can implement a few mitigation actions.
- Moderate: The jurisdiction has some capabilities, but improvement is needed to implement some mitigation actions.
- **High:** The jurisdiction has significant capabilities, as demonstrated by its authorities, programs, plans, and/or resources, and it can implement most mitigation actions.

Table 18: Capability Assessment Ranking Summary

| Capability | Ranking |
|------------------------------|---------|
| Planning and Regulatory | Low |
| Administrative and Technical | Limited |

| Capability | Ranking |
|------------------------|----------|
| Safe Growth | Moderate |
| Financial | Limited |
| Education and Outreach | Limited |

6.1.1. Planning and Regulatory Capabilities Summary⁴

The Town has previously adopted a Comprehensive Plan (2008 – 2013) and a Capital Improvements Plan (2016-2021). The Town is committed to a well-balanced land use pattern and has established a Conservation District along North Fork Creek. Among other goals, the 2008 Comprehensive Plan recognizes the need to protect environmentally sensitive areas through land use planning. The Town's Zoning & Subdivision Ordinance (adopted in 2017) prohibits the use of flood prone land for residential occupancy or other uses that might endanger health, life, or property, or aggravate erosion of flood hazard.

Chapter 18 of the Town Code includes the Erosion and Sediment Control Ordinance of the Town of Haymarket that establishes requirements for the control of erosion and sedimentation. The ordinance adopts the regulations, references, guidelines, standards and specifications promulgated by the state soil and water conservation board for the effective control of soil erosion and sediment deposition to prevent the unreasonable degradation of properties, stream channels, waters and other natural resources.

The Town has also adopted the Virginia Uniform Statewide Building Code which is enforced by the Prince William County Department of Development Services (since January 2018). The Town requires zoning approval prior to submitting a building permit application. The Town's Site Plan Checklist includes requirements to submit stormwater management computations and storm drainage system details.

The Town is a stakeholder of the Prince William County Emergency Operations Plan.

Capability Analysis: Low

Some planning and regulatory tools are in place in the Town of Haymarket; however, they demonstrate a limited integration of hazard mitigation planning with existing planning mechanisms. Adding hazard mitigation strategies when these plans are updated provides an opportunity to increase planning and regulatory capabilities.

There are several planning and regulatory tools in place that could address flooding, which is one of the top hazards in the Town. These tools include the Town's Comprehensive Plan, Capital Improvements Plan, and Erosion and Sediment Control Ordinance.

The Town of Haymarket should continue to participate in the County Hazard Mitigation Working Group

6.1.2. Administrative and Technical Capabilities Summary

- Staff in the Planning & Zoning Office include a planner and engineer with an understanding of natural and non-natural hazards who are integrated into mitigation planning.
- Staff in the Planning & Zoning Office, Police Department, and elsewhere are familiar with the Town's hazards.

⁴ Source: Town of Haymarket jurisdictional capabilities assessment and Town of Haymarket website.

- The Town identified the following departments and agencies as key stakeholders in its hazard mitigation planning process and implementation of the plan:
 - Planning & Zoning Office
 - Police Department

Capability Analysis: Limited

To strengthen the administrative and technical capabilities of the Town, all agencies with a role in hazard mitigation should be incorporated into the PWC Hazard Mitigation Working Group to effectively coordinate issues that cross agencies, with participation, at minimum, in the annual review of the HMP. This integration will provide a high level of coordination for the purpose of mitigation planning and action implementation.

6.1.3. Safe Growth Capabilities Summary

- Growth guidance instruments such as future land-use policies and the zoning & subdivision ordinance discourage or prohibit development or redevelopment within flood prone areas.
- The 2008 Comprehensive Plan includes a transportation element that addresses the appropriate placement and use of transportation systems.
- The 2008 Comprehensive Plan includes initiatives that encourage appropriate development to protect ecosystems.
- The statewide building code provides for a Base Flood Elevation (BFE) sufficient to protect property from 100-year flood events.

Capability Analysis: Moderate

The Town of Haymarket has established a moderate level of safe growth regulatory and enforcement capabilities to limit or prevent inappropriate development in identified hazard areas and protect the natural environment. Additional enhancements to these capabilities include including provisions for mitigation of natural hazards in economic development or redevelopment strategies, and the inclusion of projects identified in the mitigation plan in the town's Capital Improvement Plan (CIP). The 2016-2021 CIP did not provide funding for projects identified in the 2017 HMP.

6.1.4. Financial Capabilities Summary

- The Town has limited authority to raise additional funding through general obligation bonds and impact fees for new development.
- The 2016-2021 CIP did not provide funding for projects identified in the 2017 HMP.
- The Town applies for applicable state and federal funding opportunities.

Capability Analysis: Limited

The Town continues to identify funding opportunities for mitigation activities.

6.1.5. Education and Outreach Capabilities Summary

• The Town conducts outreach through social media for a variety of events and topics, which could include hazard specific information for the community.

Capability Analysis: Limited

Jurisdictions have multiple opportunities to promote hazard mitigation and increase the involvement of stakeholders and the public. There is a critical need to inform the additional stakeholders and the public about the benefits of hazard mitigation planning and implementation. Many hazard mitigation educational tools and materials are available from state agencies and disaster preparedness and response organizations such as the American Red Cross, FEMA, and faith-based organizations with disaster response missions.

6.2. Capability Summary – Activities that Reduce Natural Hazard Risk or Impacts

As a component of the capability assessment, PWC identified activities related to each natural hazard that support risk reduction.

Table 19: Capability Summary – Activities That Reduce Natural Hazard Risk or Impacts

| Hazard | Capability |
|-----------------------------------|---|
| Dam Failure (Including Levees) | All high-hazard dams in the county have emergency action plans for potential incidents. |
| Drought | Land use and environmental policies acknowledge the importance of protecting the natural environment. |
| Earthquake | State and international building codes provide for seismic design regulations. |
| Extreme Temperature | Public education can address preparedness to reduce risk. |
| Flood/Flash Flood | Floodplain administration and regulations ensure that inappropriate activities and future development in the floodplain are prohibited. |
| | Public education can address preparedness to reduce risk. |
| High Wind/Severe Storm | State and international building codes provide for wind loads and debris. |
| Karst/Sinkhole/Land Subsidence | Land use and environmental policies acknowledge the importance of protecting the natural environment. |
| Landslide | Land use and environmental policies acknowledge the importance of protecting the natural environment. |
| Tornado | Public education can address preparedness to reduce risk. |
| Wildfire | Public education can address preparedness to reduce risk. |
| Winter Storm | Public education can address preparedness to reduce risk. |
| Non-Natural Hazards | Public education can address preparedness to reduce risk. |
| Climate Change | Public education can address preparedness to reduce risk. |

7. Resilience to Hazards

The National Risk Index (NRI) provides an overview of hazard risk, vulnerability, and resilience. The designation of "low risk" is driven by lower loss due to natural hazards, lower social vulnerability, and higher community resilience. The Town of Haymarket is included in the Prince William County NRI in Annex 17: Prince William County.

7.1. New Hazard Risk Challenges or Obstacles to be Monitored in the Next Planning Cycle

The Town of Haymarket identified specific hazard challenges and obstacles to be monitored in the next planning cycle:

- The risk of cyber-related incidents on critical infrastructure and key resource sites.
- Impacts of climate change.
- Increases in the number of excessive rainfall events that impact new areas with flooding.

8. Mitigation Actions

8.1. Goals and Objectives

The Town of Haymarket Hazard Mitigation Planning Team adopted the regional goal statement presented in Section 8, Base Plan.

8.2. Status of Previous Actions

The Town of Haymarket monitors actions and tracks progress through the periodic review, evaluation, revision, and update of the NOVA HMP. All of the town's previous action items are ongoing.

Table 20: Status of Previous Mitigation Actions, Town of Haymarket

| Previous Action Item # | Agency/Department Mitigation Action | Status |
|---------------------------|--|---------|
| 2017-1 | Access roadway structures throughout town | Ongoing |
| 2017-2 | Employ warning systems | Ongoing |
| 2017-3 | RL and SRL outreach | Ongoing |
| 2017-4 | Stormwater inventory framework/monitoring system | Ongoing |
| 2017-5 | NFIP compliance | Ongoing |

8.3. New Mitigation Actions

The Town of Haymarket County Hazard Mitigation Planning Team identified two new mitigation actions to include in this plan. **Attachment 4** of this annex includes a table that summarizes each action, describing the proposed activity, priority level, estimated cost, and lead agency.

Table 21: New Mitigation Actions, Town of Haymarket

| 2022 Action Item Number | Agency/Department Mitigation Action | Status |
|----------------------------|-------------------------------------|------------------|
| 2022-1 | Access Roads | Newly Identified |
| 2022-2 | Develop Evacuation Plan | Newly Identified |

8.4. Action Plan for Implementation and Integration

The Town of Haymarket will work in coordination PWC Hazard Mitigation Working Group on the implementation of Mitigation Actions. The Town of Haymarket designated mitigation coordinator is responsible for implementing the mitigation plan on two levels: implementation of the jurisdiction's actions and facilitating the implementation of the multi-jurisdictional regional plan. Tasks to ensure that the jurisdiction's actions are implemented are integrated into the *Action Plan for Implementation and Integration* (which includes the prioritized list of Mitigation Actions) and plan maintenance procedures described in the next section.

The Action Plan for Implementation and Integration describes how the town's hazard mitigation risk assessment and goals will be incorporated into its existing plans and procedures.

Table 22: Action Plan for Implementation and Integration of Mitigation into Existing Plans and Procedures

| Existing Plan or Procedure | Description of How Mitigation Will Be Incorporated or Integrated |
|--|---|
| Maintain regulatory requirements of the floodplain management program (NFIP). | Train identified town staff on the NFIP program and update town ordinances or plans as needed to help maintain NFIP requirements. |
| Identify opportunities for mitigation education and outreach. | Determine how the town's current outreach program can be used for mitigation and preparedness related outreach. |
| Review/update zoning codes for consistency with mitigation goals. | The Town will consider incorporating mitigation goals into the Zone and Subdivision Ordinance during the review process; however, some components of zoning codes cannot be changed as they are adopted at the Commonwealth level. |
| Maintain stormwater management plan requirement for development. | The Town will continue to require stormwater management plans as part of the plan of development process in conjunction with site plan or subdivision plan approval. |
| Develop emergency plans to address evacuation. | The Town, working with external stakeholders at the county and regionally, will develop an evacuation plan. |
| Maintain ongoing enforcement of existing policies. | The Town will continue to review all policies to ensure necessary enforcement requirements are being done. |
| Monitor funding opportunities. | The Town will continue to monitor all possible funding opportunities and work with the PWC Hazard Mitigation Working Group and other stakeholders to identify and expand previously untapped funding sources for mitigation projects as they are identified and eligible. |
| Incorporate goals and objectives into day-to-day government functions. | The Town will work with the PWC Mitigation Working Group and Town leadership to identify ongoing integration of mitigation activities, where applicable, in day-to-day government functions. |
| Incorporate goals into day-to-day development policies, reviews, and priorities. | The Town will work with the PWC Mitigation Working Group and Town leadership to continue to identify ongoing integration of mitigation activities, where applicable, in day-to-day development of policies, reviews, and priorities. |

9. Annex Maintenance Procedures

The Point of Contact for the Northern Virginia Mitigation Planning Committee is the facilitator for the process to monitor, evaluate, and update the **NOVA HMP**, **Base Plan** and is responsible for initiating the annual activities, convening the Planning Committee, and providing follow-up reports to designated entities defined in the method and schedule for the plan maintenance process, as outlined in **Section 3**, **Base Plan**.

Table 23: Town of Haymarket Plan Maintenance Responsibilities for the NOVA Hazard Mitigation Plan (Base Plan)

| Activity | Responsibilities |
|---------------------|--|
| Monitoring the plan | Represent the jurisdiction during the monitoring process. Collect, analyze, and report data to the NOVA Planning Group. Maintain records and documentation of all jurisdictional monitoring activities. Help disseminate reports to stakeholders and the public. Promote the mitigation planning process with the public and solicit public input. |
| Evaluating the plan | Represent the jurisdiction during the evaluation process. Collect and report data to the NOVA Planning Group. Maintain records and documentation of all jurisdictional evaluation activities. Help disseminate information and reports to stakeholders and the public. |
| Updating the plan | Represent the jurisdiction during the planning cycle, including plan review, revision, and updating. Collect and report data to the NOVA Planning Group. Maintain records and documentation of all reviews and revisions of the plan by the jurisdiction. Help disseminate reports to stakeholders and the public. |

9.1. Maintenance of the Jurisdiction Annex

In addition to maintenance of the **NOVA HMP Base Plan**, the Town of Haymarket Mitigation Planning Coordinator will facilitate the method and schedule for maintaining the Town of Haymarket Jurisdiction Annex. The town's maintenance method and schedule may coincide with that of Prince William County and be conducted simultaneously.

9.1.1. Plan Maintenance Schedule

- Monitor: Annually and/or following major disaster(s)
- Evaluate: Annually and/or following a major disaster(s)
- Update: Annual tasks over the five-year planning cycle; planning process in the fifth year

Table 24: Town of Haymarket Annex Maintenance Procedures

| Activity | Procedure and Schedule | Outcome |
|-------------------------|---|--|
| Monitoring the Annex | Schedule the annual plan review with the jurisdiction planning team. Review the status of all mitigation actions, using the Mitigation Action Implementation Worksheet (NOVA HMP Base Plan, Section 3, Attachment A). | Produce an annual report that includes the following: Status update of all mitigation actions. Summary of any changes in hazard risk or vulnerabilities and capabilities. Summary of activities conducted for the Action Plan for Implementation and Integration. |
| Evaluating the Annex | Schedule the annual plan evaluation with the jurisdiction planning team. Evaluate the current hazard risks and vulnerabilities, and hazard mitigation capabilities using the Planning Considerations Worksheet (NOVA HMP Base Plan, Section 3, Attachment C). | Submit the annual report to the Prince William County/NOVA HMP Planning Committee Point of Contact. |
| Updating the Annex | Coordinate with Prince William County and the Northern Virginia jurisdictions to identify the method and schedule for the five-year update of the NOVA HMP. Participate in the planning process. Provide input related to the plan components. Following FEMA Approvable Pending Adoption (APA) designation, adopt the updated plan. | Adoption of the FEMA-approved plan every five years helps maintain the jurisdiction's eligibility for federal post- disaster funding. |

Mitigation actions presented in the Town of Haymarket Jurisdiction Annex may be reviewed, revised, and updated at any time.

The Town of Haymarket will continue to be a planning partner with multiple jurisdictions and regional entities, including Prince William County, to identify hazard mitigation opportunities that reduce risk to the hazards identified in this plan.

10. Annex Adoption

The Town of Haymarket Jurisdiction Annex will be adopted simultaneously with the adoption of the *NOVA HMP*.

11. Attachments

- Attachment 1: Adoption Resolution
- Attachment 3: Documentation of Public Participation
- Attachment 4: Mitigation Actions

11.1. Attachment 1: Adoption Resolution

[This page is a placeholder for the Adoption Resolution for this jurisdiction.

11.2. Attachment 3: Documentation of Public Participation



Figure 5: Screenshot of Public Outreach

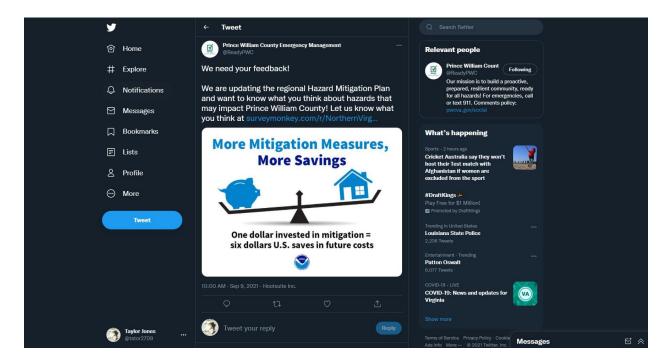


Figure 6: Screenshot of Social Media Public Outreach

11.3. Attachment 4: Mitigation Actions

Mitigation Action Matrix

| Project No. | Agency/ Department Mitigation Action | Lead Agency/ Department/ Organization | Hazard | Funding Source | Target Completion Date | Interim Measure of Success | Priority | Comment | Current Status |
|----------------|---|---|---------------------------|---|------------------------------|---|----------|---------|-------------------|
| 2017- | Access the roadway structure at various intersections throughout the Town of Haymarket to avoid repeated flooding. | Town of Haymarket Police Department | Dam Failure Earthquake | FEMA Unified Hazard Mitigation Assistance Funding, County funding | December | Identify funding sources by 2017 | High | No | |
| 2017-2 | Continue to identify and employ a broad range of warning systems throughout the Town of Haymarket. | Town of Haymarket Police Department | All Hazards | UASI Funding, DHS grants, town/county funding | December 2020 | Identify one new warning system to utilize by December 2017 | High | No | Ongoing |
| 2017-3 | Conduct annual outreach to each FEMA-listed repetitive loss and severe repetitive loss property owner, providing information on mitigation programs (grant assistance, mitigation measures, and flood insurance information) that can assist them in reducing their flood risk. | Town of Haymarket Town Manager | All Hazards | FEMA Unified Hazard Mitigation Assistance Funding for qualified structures | Ongoing | Develop outreach materials, or identify appropriate outreach materials for dissemination by June 2018 | Medium | No | Ongoing |
| 2017-6 | Review locality's compliance with the National Flood Insurance Program with an annual review of the floodplain ordinances and any newly permitted activities in the 100-year floodplain. Additionally, conduct annual review of repetitive loss and severe | Town of Haymarket Police Department | Flood Earthquake | General funds | Ongoing | Establish a schedule of review and review committee (if necessary) by June 2017 | Medium | No | Ongoing |

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| Project No. | Agency/ Department Mitigation Action | Lead Agency/ Department/ Organization | Hazard | Funding Source | Target Completion Date | Interim Measure of Success | Priority | Comment | Current Status |
|----------------|---|---|---|--|------------------------------|---|----------|--------------------------------|-------------------|
| | repetitive loss property list requested of VDEM to ensure accuracy. Review will include verification of the geographic location of each repetitive loss property and determination if that property has been mitigated and by what means. Provide corrections if needed by filing form FEMA AW-501. | | | | | | | | |
| 2017-7 | Establish a schedule of review and review committee (if necessary) by June 2017. | Town of Haymarket Town Manager and Building Official | All Hazards | FEMA Unified Hazard Mitigation Assistance Funding for qualified structures | December 2018 | Research and identify applicable funding mechanisms to develop the plan | Low | No | |
| 2022-1 | Assess Crossroads Village Center construction impact on flooding once construction is complete. | Haymarket Police Department and Town of Haymarket Planner | Flood Karst/Sinkhole/Land Subsidence | Town and County funding | December 2025 | Identify Flood Prone areas by December 2023. | Low | Groundbreaking has just begun. | |
| 2022-2 | Develop evacuation and safe shelter plan for town businesses and citizens. | Haymarket Police Department and Town of Haymarket Planner | Dam Failure Earthquake High Wind/Severe Storm Tornado Wildfire Winter Weather | Town and County funding | December 2025 | Have safe shelter areas identified by December 2023. | High | | |

Annex 17-B: Town of Haymarket