

CHAPTER 5

CAPABILITIES ASSESSMENT

PURPOSE

This chapter evaluates the current capabilities of the communities within the Central Shenandoah planning district to reduce the impacts of the threats and hazards identified in Chapter 4: Threat and Hazard Identification and Risk Assessment. The primary goal of the Capabilities Assessment is to understand the extent to which local governments can implement hazard mitigation strategies and to identify opportunities for enhancing these capabilities.

The assessment consists of three main components:

- **Plans, Policies, and Programs:** An inventory of existing plans, policies, and programs maintained by local governments in the region.
- **Staff Capacity:** An analysis of the capacity of these governments and special districts to carry out mitigation strategies and actions based on the resources and frameworks identified in the inventory.
- **Special Districts:** A brief description of the planning and staff capacity of the four special districts included in the plan.

PLANS, POLICIES, AND PROGRAMS

Planning capability refers to a jurisdiction's ability to develop and implement plans that guide growth and development in a responsible way. This includes promoting public safety, supporting the local economy, protecting environmental, historic, and cultural resources, and safeguarding the overall well-being of the community. Planning efforts offer opportunities to incorporate hazard mitigation into local decisions.

LOCAL PLANS

The jurisdictions within the Central Shenandoah Region have established a variety of planning mechanisms that integrate mitigation-related information and strategies, including:

- **Comprehensive Land Use Plan:** A comprehensive land use plan establishes the overall vision for what a community wants to be and serves as a guide to future governmental decision making. It contains sections on demographic conditions, land use, natural resources, economic development, transportation, and community facilities. Community strategies included in these plans can encourage the achievement of risk reduction goals.
- **Capital Improvement Plan (CIP):** A capital improvement plan is a multi-year planning document that identifies and prioritizes major infrastructure and capital projects, along with their estimated costs and funding sources. The purpose of the plan is to guide the community's long-term physical and fiscal planning. A CIP is often aligned with comprehensive plans and can incorporate mitigation strategies by prioritizing infrastructure improvements.
- **Community Wildfire Protection Plan (CWPP):** The Healthy Forests Restoration Act (HFRA) of 2003 created the opportunity for local governments to prioritize goals and needs for the wildland areas

through community wildfire protection plans. A CWPP addresses issues in a community such as wildfire response, hazard mitigation, community preparedness, and structure protection. In 2020, the CSPDC prepared a Regional Wildfire Protection Plan that includes all 21 localities.

- **Emergency Operations Plan (EOP):** An emergency operations plan defines roles, responsibilities, and procedures for mobilizing resources during and after an emergency or disaster. These plans typically include a section dedicated to hazard mitigation, outlining strategies to reduce future risks. Each locality in the region either maintains its own EOP or participates in a regional plan.

- **Continuity of Operations Plan (COOP):** A continuity of operations plan is a strategic plan developed by governments, agencies, and organizations to ensure that essential functions can continue during and after a wide range of emergencies, including natural disasters, pandemics, cyberattacks, or other disruptions. The plan identifies and prioritizes critical functions that must continue without interruption and strategies to minimize downtime.

- **Hazardous Materials Emergency Response Plan (HMERP):** Required by federal law under Title III of the Superfund Amendments and Re-authorization Act (SARA), these plans outline the procedures to be followed in the event of a chemical emergency such as the accidental release of toxic substances. Each locality in the region either has a local HMERP or participates in a regional HMERP.

- **Stormwater Improvement Plan:** Common for municipalities with separate storm sewer systems (MS4s), a stormwater improvement plan is a planning document that outlines strategies, projects, and policies to manage and improve a community's stormwater system. Its goal is to reduce flooding, minimize water pollution, protect infrastructure, and enhance water quality by improving how stormwater is collected, conveyed, treated, and discharged.

- **Chesapeake Bay TMDL Action Plan:** In 2010, the Environmental Protection Agency (EPA) established the Chesapeake Bay Total Maximum Daily Load (TMDL), which is the maximum amount of pollutant that a body of water can receive and still meet water quality standards. A Chesapeake Bay TMDL Action Plan is a required planning document for MS4 localities and entities in the Chesapeake Bay watershed that outlines how they will reduce pollution.

- **NFIP Community Rating System (CRS):** The Community Rating System (CRS) is a voluntary program within the National Flood Insurance Program (NFIP) that encourages communities to take proactive steps to reduce flood risk. In return for implementing additional floodplain management activities, residents in participating communities receive discounts on their flood insurance premiums. To date, the Town of Bridgewater is the only community in the region that participates in the program.

- **Flood Resilience Plan:** A flood resilience plan, as recognized by the Virginia Department of Conservation and Recreation (DCR), is a strategic planning document funded and administered under programs like the Community Flood Preparedness Fund (CFPF) that local governments develop to assess flood risks and prioritize mitigation actions. The City of Buena Vista, the City of Staunton, and the Town of Craigsville have either received grant funding or have begun developing individual flood resilience plans. Concurrently, the CSPDC is preparing a region-wide flood resilience plan, which includes all remaining localities.

Table 5.1. Local Plans										
		Comprehensive Land Use Plan	Capital Improvement Plan	Wildfire Protection Plan	Emergency Operations Plan	SARA Title III HazMat Plan	Stormwater Improvement Plan	Chesapeake Bay TMDL Action Plan	NFIP Community Rating System	Flood Resilience Plan
Harrisonburg-Rockingham	City of Harrisonburg	Y	Y	Y	Y	Y	Y	Y	N	IP
	Rockingham County	Y	Y	Y	Y	Y	?	N	N	IP
	Town of Bridgewater	Y	Y	Y	Y	Y	?	Y	Y	IP
	Town of Broadway	Y	Y	Y	Y	Y	N	N	N	IP
	Town of Dayton	Y	Y	Y	Y	Y	N	N	N	IP
	Town of Elkton	Y	Y	Y	Y	Y	N	N	N	IP
	Town of Grottoes	Y	?	Y	Y	Y	N	N	N	IP
	Town of Mt. Crawford	Y	?	Y	Y	Y	N	N	N	IP
	Town of Timberville	Y	?	Y	Y	Y	N	N	N	IP
Staunton-Augusta-Waynesboro	City of Staunton	Y	Y	Y	Y	Y	?	Y	N	IP
	City of Waynesboro	Y	Y	Y	Y	Y	Y	Y	N	IP
	Augusta County	Y	Y	Y	Y	Y	?	Y	N	IP
	Town of Craigsville	?	?	Y	Y	Y	N	N	N	IP
Rockbridge-Lexington-Buena Vista	City of Buena Vista	Y	Y	Y	Y	?	N	N	N	IP
	City of Lexington	Y	Y	Y	Y	?	N	N	N	IP
	Rockbridge County	Y	Y	Y	Y	?	N	N	N	IP
	Town of Glasgow	Y	?	Y	Y	?	N	N	N	IP
	Town of Goshen	?	?	Y	Y	?	N	N	N	IP
Bath-Highland	Bath County	Y	Y	Y	Y	Y	N	N	N	IP
	Highland County	Y	?	Y	Y	?	N	N	N	IP
	Town of Monterey	Y	?	Y	Y	?	N	N	N	IP

Key: Yes (Y), No (N), In Progress (IP), Undetermined (?)

CODES, FEES, AND CERTIFICATIONS

The ability to adopt and enforce codes, regulations, and fees is a critical component of a community's hazard mitigation capability. These regulatory tools provide the legal framework and financial mechanisms needed to reduce vulnerability to natural hazards. The jurisdictions within the Central Shenandoah Region utilize various codes, ordinances, fees, and certifications to support mitigation efforts, including:

- **Virginia Uniform Statewide Building Code:** The Virginia Uniform Statewide Building Code (USBC) establishes minimum standards for the construction, maintenance, and rehabilitation of buildings and structures throughout the Commonwealth. Administered by the Virginia Department of Housing and Community Development (DHCD), the USBC incorporates the International Building Code (IBC) and related construction standards. The code includes provisions for structural integrity, fire safety, energy efficiency, and hazard resistance.

- **Floodplain Management Ordinance:** A floodplain management ordinance is a local regulation that governs development in Special Flood Hazard Areas (SFHAs) as mapped by the Federal Emergency Management Agency (FEMA). These ordinances are required for participation in the National Flood Insurance Program (NFIP) and establish standards for new construction, substantial improvements, and other development activities in flood-prone areas. Key provisions typically include requirements for elevation of structures, floodproofing standards, limitations on fill and encroachments, and permitting procedures.

- **Utility Fees (Stormwater, Water, Sewer):** Utility fees provide a dedicated revenue stream that localities can use to fund infrastructure improvements, maintenance, and capital projects related to hazard mitigation. Stormwater utility fees are collected from property owners based on the amount of impervious surface on their property and are used to manage stormwater runoff, maintain drainage systems, and implement flood control projects. Water and sewer fees similarly support infrastructure that must be resilient to natural hazards. Communities with MS4 permits often rely on stormwater fees to fund compliance activities and system improvements.

- **StormReady Certification:** StormReady is a voluntary program administered by the National Weather Service (NWS) that recognizes communities for taking proactive steps to improve their preparedness for severe weather events. To achieve StormReady certification, a community must establish a 24-hour warning point and emergency operations center, have multiple ways to receive and disseminate weather warnings, create a system to monitor local weather conditions, promote public readiness through education and outreach, and develop a formal hazardous weather plan.

Table 5.2. Local Codes, Fees, and Certifications							
				Utility Fees			
		Building Code	Floodplain Ordinance	Stormwater	Water	Sewer	StormReady Certification
Harrisonburg-Rockingham	City of Harrisonburg	Y	Y	Y	Y	Y	Y
	Rockingham County	Y	Y	Y	Y	Y	IP
	Town of Bridgewater	Y	Y	Y	Y	Y	N
	Town of Broadway	Y	Y	N	Y	Y	N
	Town of Dayton	Y	Y	N	Y	Y	N
	Town of Elkton	Y	Y	N	Y	Y	N
	Town of Grottoes	Y	Y	N	Y	Y	N
	Town of Mt. Crawford	Y	Y	N	Y	Y	N
	Town of Timberville	Y	Y	N	Y	Y	N
Staunton-Augusta-Waynesboro	City of Staunton	Y	Y	Y	Y	Y	IP
	City of Waynesboro	Y	Y	Y	Y	Y	Y
	Augusta County	Y	Y	Y	Y	Y	Y
	Town of Craigsville	Y	Y	N	Y	Y	N
Rockbridge-Lexington-Buena Vista	City of Buena Vista	Y	Y	N	Y	Y	N
	City of Lexington	Y	Y	Y	Y	Y	N
	Rockbridge County	Y	Y	N	Y	Y	Y
	Town of Glasgow	Y	Y	N	Y	Y	N
	Town of Goshen	Y	Y	N	Y	Y	N
Bath-Highland	Bath County	Y	Y	N	Y	Y	N
	Highland County	Y	Y	N	Y	Y	N
	Town of Monterey	Y	Y	N	Y	Y	N

Key: Yes (Y), No (N), In Progress (IP), Undetermined (?)

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) ACTIVITIES

Communities across the country build their flood management capabilities by participating in the National Flood Insurance Program (NFIP). The NFIP allows property owners and renters in participating communities to purchase federal flood insurance policies to recover financial losses after a flood.

All twenty-one jurisdictions in the Region participate in the National Flood Insurance Program (NFIP). As part of the Hazard Mitigation planning process, the Counties and Cities were asked to complete surveys providing information on floodplain identification and mapping, Floodplain Management, and Flood Insurance. Because much of the floodplain management for the Towns is done through the County where they are located, the information provided by each County was relevant for the Towns in that County as well. The surveys are included in Appendix G – NFIP Surveys.

Table 5.3. Local Flood Management Resources

		Floodplain Administrator (Title)	FIRM Effective Date(s)
Harrisonburg-Rockingham	City of Harrisonburg	Zoning Administrator; City Engineer	2008
	Rockingham County	Director of Engineering	2008 (most), 2014 (few)
	Town of Bridgewater	Environmental Agent/CRS Coordinator	2014
	Town of Broadway	Town Manager	2008
	Town of Dayton	Town Manager; Zoning Administrator	2008
	Town of Elkton	Director of Community Development	2008
	Town of Grottoes	Town Manager	2008
	Town of Mt. Crawford	Town Manager	2014
	Town of Timberville	Town Manager	2008
Staunton-Augusta-Waynesboro	City of Staunton	Building Official	2007
	City of Waynesboro	Zoning Administrator	2007 (most), 2015 (one)
	Augusta County	Zoning Administrator; County Engineer	2007 (most), 2015 (few)
	Town of Craigsville	Zoning Administrator; Police Chief	2007
Rockbridge-Lexington-Buena Vista	City of Buena Vista	Director of Planning & Com. Dev.	2000
	City of Lexington	Director of Planning & Development	2000
	Rockbridge County	Director of Community Development	2000
	Town of Glasgow	Town Manager	2000
	Town of Goshen	Town Clerk	2000
Bath-Highland	Bath County	County Planner/Zoning Administrator	2009
	Highland County	Building Official	2009
	Town of Monterey	Building Official	2009

STAFF CAPACITY

Mitigation cuts across many disciplines. For a successful mitigation program, it is necessary to have a broad range of people involved with diverse backgrounds. Across the jurisdictions in the Central Shenandoah region, this expertise can be found in local government staff in the following areas or departments:

- **Administrative Staff** manage day-to-day operations. The Counties in the region are led by an elected Board of Supervisors who appoints a County Administrator. In the Cities, a City Council are the elected officials and a City Manager, appointed by Council, manages operations. The Towns in the region have an elected Town Council and an appointed Town Manager (often part-time).
- **Community Development and Building Inspection Departments** conduct land use planning based on knowledge of land development and land management practices. They may also possess expertise in resource development and grant writing. These departments may also house a community's floodplain manager and other staff with the ability to assess the natural hazards vulnerability of the community. As all the communities are in good standing in the National Flood Insurance Program (NFIP), these departments may also enforce NFIP requirements.
- **Engineering and Public Works Departments** have the training in construction practices related to buildings and infrastructure. The Engineering Department may oversee the design and construction of infrastructure including roadways and stormwater facilities. The Public Works Department oversees the maintenance of the community's infrastructure, water treatment and sewer facilities.
- **Emergency Management, Fire and Rescue Staff** are involved with natural and man-made hazards and disasters and are closely involved with mitigation as it is one of the four cornerstones of the emergency management cycle. Fire and Rescue departments provide fire suppression and medical aid at the scene of disasters and may be involved with hazardous materials incidents.
- **Grant Administration Staff** have expertise in grant writing and administration. The CSPDC offers this service to each of the 21 localities, as it is less common to have local staff dedicated to grants.
- **Certified Floodplain Managers (CFMs)** are recognized by the Association of State Floodplain Managers (ASFM) as highly qualified individuals for floodplain management. The intent of ASFM's CFM program is to provide professional development and increase exposure to not only the National Flood Insurance Program (NFIP) but also comprehensive floodplain management practices.

Table 5.4. Local Administrative and Technical Staff								
		Engineering or Public Works Dept.	Code Enforcement Staff	Chief Building Officer	Civil Engineer	Emergency Manager	Floodplain Manager	Certified Floodplain Manager (CFM)
Harrisonburg-Rockingham	City of Harrisonburg	Y	Y	Y	N	Y	Y	?
	Rockingham County	Y	Y	Y	N	Y	Y	?
	Town of Bridgewater	^	^	^	^	^	Y	^
	Town of Broadway	^	^	^	^	^	Y	^
	Town of Dayton	^	^	^	^	^	Y	^
	Town of Elkton	^	^	^	^	^	Y	^
	Town of Grottoes	^	^	^	^	^	Y	^
	Town of Mt. Crawford	^	^	^	^	^	Y	^
	Town of Timberville	^	^	^	^	^	Y	^
Staunton-Augusta-Waynesboro	City of Staunton	Y	Y	Y	N	Y	Y	?
	City of Waynesboro	Y	Y	Y	N	Y	Y	?
	Augusta County	Y	Y	Y	N	Y	Y	Y
	Town of Craigsville	^	^	^	^	^	Y	^
Rockbridge-Lexington-Buena Vista	City of Buena Vista	Y	Y	Y	N	Y	Y	?
	City of Lexington	Y	Y	Y	N	Y	Y	N
	Rockbridge County	Y	Y	Y	N	Y	Y	?
	Town of Glasgow	^	^	^	^	^	Y	^
	Town of Goshen	^	^	^	^	^	Y	^
Bath-Highland	Bath County	Y	Y	Y	N	Y	Y	N
	Highland County	Y	Y	Y	N	Y	Y	N
	Town of Monterey	^	^	^	^	^	Y	^

Key: Yes (Y), No (N), Uses County Resources (^), Undetermined (?)

POTENTIAL TO EXPAND CAPACITY

Each locality's ability to expand mitigation capacity varies significantly based on jurisdiction size, staff resources, and available funding. While cities and counties generally maintain more dedicated staff than towns, all jurisdictions across the Central Shenandoah region share common challenges and opportunities for growth. This section describes the current limitations facing local governments, identifies specific opportunities to enhance mitigation capabilities, and outlines regional strategies that can help all participants strengthen their overall capacity.

CURRENT LIMITATIONS

Staffing constraints represent one of the most significant barriers to expanding mitigation capacity across the region. In many jurisdictions, particularly the smaller towns, staff members fulfill multiple roles simultaneously, leaving little time for proactive hazard mitigation planning, public outreach, or grant development. Towns often rely on county resources for engineering, code enforcement, building inspection, emergency management, and floodplain administration, meaning their mitigation capacity is largely dependent on the bandwidth of county staff who are already managing responsibilities across a broader service area.

Even among the larger cities and counties, certain technical capacities remain limited. As shown in Table 5.4, no jurisdiction in the region currently employs a dedicated civil engineer specifically focused on hazard-related infrastructure assessment. Similarly, regional participation in CRS is low, with only the Town of Bridgewater currently enrolled.

OPPORTUNITIES TO IMPROVE LOCAL CAPABILITIES

Despite these constraints, there are meaningful opportunities for each type of jurisdiction to grow its mitigation capacity:

- **Flood Resilience Planning**: Multiple jurisdictions are either developing standalone flood resilience plans or participating in the CSPDC's regional Flood and Stormwater Resilience Plan. Completing these plans and integrating their findings into local comprehensive plans, capital improvement plans, and mitigation action items will significantly strengthen the ability of each jurisdiction to identify flood risks and prioritize investments. Jurisdictions that have already received individual grant funding for flood resilience planning should ensure their completed plans are incorporated into updated local ordinances and capital budgets.
- **Grant Writing and Administration Capacity**: Access to hazard mitigation grant programs, including FEMA's Hazard Mitigation Grant Program (HMGP), Building Resilient Infrastructure and Communities (BRIC) program, and Virginia's Community Flood Preparedness Fund (CFPF), requires both technical knowledge and administrative bandwidth. Localities should work with the CSPDC and Virginia Department of Emergency Management (VDEM) to identify grant opportunities and develop project applications. Investing in grant administration capacity through local staff training and regional coordination has the potential to unlock significant federal and state funding for mitigation projects.

- **Stormwater Utility Establishment**: Several jurisdictions in the region do not currently collect stormwater utility fees, limiting their ability to fund drainage improvements and flood control projects. Establishing a stormwater utility fee, or expanding an existing one, could create a dedicated, sustainable funding stream for capital projects that directly address flood and stormwater hazards. Jurisdictions without MS4 permits may find this especially valuable as development pressures increase over time.
- **Community Rating System Enrollment**: Any NFIP-participating community with a floodplain management ordinance and active floodplain administrator is eligible to apply for CRS participation. Expanding CRS enrollment across the region would not only reduce flood insurance premiums for residents but would also incentivize jurisdictions to implement higher standards for floodplain management, stormwater control, and public outreach. The Town of Bridgewater's existing participation may serve as a model for other communities, and the CSPDC can provide technical support to jurisdictions exploring enrollment.

REGIONAL COORDINATION STRATEGIES

Regional coordination through the CSPDC offers the most efficient pathway for expanding mitigation capacity across all 21 participating jurisdictions, particularly for smaller towns that lack the resources to pursue many of these improvements independently. Specific regional strategies include:

- **Shared Technical Assistance**: The CSPDC can serve as a regional resource for, grant application support and hazard mitigation planning expertise, reducing the burden on individual jurisdictions to maintain these capabilities in-house.
- **Coordinated Training and Professional Development**: Regional coordination of FEMA training opportunities and floodplain management workshops would improve access for staff across all jurisdictions and help build a more credentialed and knowledgeable regional workforce.
- **Standardized Public Education and Outreach**: Developing a suite of shared public outreach materials on flood risk, wildfire preparedness, and other relevant hazards would allow all jurisdictions to conduct community education efforts without each independently developing resources from scratch. These materials could be distributed through local government websites, social media, utility bill inserts, and community events.

Without sustained investment in these areas, jurisdictions will continue to face significant constraints in implementing the mitigation actions identified throughout this plan. The communities of the Central Shenandoah region are encouraged to view capacity building not as a secondary priority, but as a foundational investment that improves the effectiveness of every other mitigation strategy.

SPECIAL DISTRICTS

The special districts within the planning region are not locality-equivalents but operate in partnership with local governments. As such, each maintains distinct capabilities tailored to their specific operational missions and service areas.

JAMES MADISON UNIVERSITY

James Madison University (JMU) is a state-owned institution with an Office of Emergency Management staffed by the Director of Risk and Emergency Management, Fire Safety & Emergency Management Coordinator, and a part-time Emergency Management Specialist. Beyond its participation in the CSHMP, JMU maintains and implements multiple emergency planning documents, including the Crisis and Emergency Management Plan, Building Emergency Action Plans, a Continuity of Operations Plan (COOP), and a joint Emergency Operations Plan (EOP) developed in collaboration with the City of Harrisonburg and Rockingham County. These plans guide the university's preparedness, response, recovery, and mitigation operations.

JMU is designated as a Municipal Separate Storm Sewer System (MS4) entity due to it being a state university that operates and maintains its own storm sewer system. The University's Facilities Management: Engineering and Construction department includes dedicated staff responsible for managing and implementing its MS4 Program Plan and TMDL Action Plan to address stormwater management, pollution prevention, and water quality requirements.

MAURY SERVICE AUTHORITY

The Maury Service Authority (MSA) provides water and wastewater services to Rockbridge County and the City of Lexington, operating critical infrastructure essential to regional hazard mitigation. MSA maintains internal emergency response protocols and operational continuity plans designed to ensure uninterrupted service delivery during hazard events. Authority staff coordinate closely with local emergency management officials and maintain mutual aid agreements to support regional response and recovery operations.

BATH COUNTY SERVICE AUTHORITY

The Bath County Service Authority (BCSA) operates water and wastewater systems serving communities throughout Bath County. BCSA maintains internal emergency preparedness procedures and priorities aligned with county hazard mitigation objectives, with operational staff working in close coordination with Bath County emergency management to address infrastructure threats and service disruptions.

AUGUSTA WATER

Augusta Water operates water and wastewater systems serving communities throughout Augusta County, managing ten (10) separate public water systems and nine (9) wastewater treatment facilities along with their associated distribution and collection infrastructure. Augusta Water maintains internal emergency action plans for all facilities and operational continuity plans to ensure uninterrupted service delivery during hazard events. Authority staff coordinate with Augusta County emergency management officials and local and state counterparts to address infrastructure threats and service disruptions.