



## SECTION 7 LOCAL CAPABILITY ASSESSMENT

### 2023 SHMP UPDATE CHANGES

- ❖ The Local Capability Assessment section was added to the State Hazard Mitigation Plan (SHMP).
- ❖ The section includes an assessment of planning and legal, administrative and technical, financial, and education and outreach capabilities for local jurisdictions.

#### 7.1 Local Capabilities

Hazard mitigation efforts begin at the local level, and the State of West Virginia (the State) is responsible for supporting local governments with their mitigation planning activities. This ensures that local communities are aware of hazard data, planning resources, and the State's priorities for mitigation. In addition, local mitigation capabilities increase the State's awareness of local priorities and data. A mutual understanding between states and local governments better aligns mitigation strategies and directs available resources toward effective mitigation planning at both the State and local levels.

Capability assessments generally include but are not limited to the following categories: Planning and Regulatory (federal/State/local statutes; land use, building codes, etc.); Administrative and Technical (organization, roles and responsibilities, technical resources); Financial (internal and external funding sources); and Education and Outreach (training). For those communities that participate in the National Flood Insurance Program (NFIP), an assessment of the jurisdiction's capacity and capability to implement the program's requirements is also required.

The *West Virginia Regional Planning and Development Act of 1971* divided the State into 11 Regional Planning and Development Councils (RPDCs), with Jefferson County remaining as a stand-alone region, to maximize the use of funding and support small communities (WVARC 2023). The RPDCs provide a variety of services to local communities, including developing each region's local hazard mitigation plan (LHMP). The responsibility for enforcement activities and implementation of the LHMP lies with the individual jurisdictions within the region; however, the RPDCs provide support for expansion and improvement of water and sewer facilities, infrastructure, transportation, employment, industry, small business development, housing, health care, education, and recreation (WVARC 2023).

The ability to effectively meet the goals of the SHMP and LHMPs is dependent upon the capabilities at the State and local levels. The following sections summarize capabilities and resources existing at the local level that aid in implementing mitigation actions and achieving the goals stated in the SHMP.



## 7.2 Summary of Effectiveness of Local Mitigation Capabilities

**44 C.F.R. §201.4(c)(3)(ii):** The State plan must include a general description and analysis of the effectiveness of local government mitigation policies, programs, and capabilities including a summary of current local government policies, programs, and capabilities. The plan must describe the effectiveness of local government migration policies, programs, and capabilities including challenges to implementing these mitigation policies, programs, and capabilities.

All counties and a majority of the eligible local governments within the State have identified, leveraged, and developed capabilities that are effective in mitigating risk from natural hazards and support the development of LHMPs. These capabilities are discussed in LHMPs and serve as the basis for the implementation of mitigation actions.

Disasters are inherently local events; therefore, the assessment of the State's capabilities would not be complete without an examination of local capabilities. This review and examination was used to inform and influence the State's mitigation priorities, as discussed in Section 6 (Mitigation Strategy). The review was conducted by examining the LHMPs. This review focused on the following aspects of LHMPs:

- **Foundational Capabilities** — Such as planning and legal, financial, and education and outreach capabilities that are relevant to implementing hazard mitigation actions in West Virginia.
- **Floodplain Management Capabilities** — Such as staff capacity, enforcement, adoption of higher standards, general information on effectiveness and process, and efforts to address repetitive loss and severe repetitive loss properties.
- **Land Use Planning** — Integration of hazard mitigation into local comprehensive land use plans.
- **Evaluation and Effectiveness** — Identification of challenges and opportunities, unique sources of funding, mitigation successes, and determinations on effectiveness of mitigation actions.

Like SHMPs, the Federal Emergency Management Agency (FEMA) requires LHMPs to be updated every 5 years. The 2023 SHMP includes discussion on emerging capabilities that have arisen in the regions and local jurisdictions during their performance period that are not reflected in those plans.

### 7.2.1 Local Foundational Capabilities for Hazard Mitigation

County policies, programs, funding, and other capabilities are used to support and accomplish hazard mitigation goals and objectives. The LHMPs identify and evaluate regional capabilities for implementing hazard mitigation. In order to summarize these capabilities for the 2023 SHMP, a list of foundational capabilities for accomplishing hazard mitigation was developed based on FEMA local mitigation planning guidance, subject matter expertise, and suggestions from the State Planning Team. This list was not intended to be inclusive of every capability discussed in the LHMPs or every capability that may be used to support hazard mitigation at the local level.



## PLANNING AND LEGAL CAPABILITIES

### Comprehensive Plans

Comprehensive plans are plans that establish objectives and guide the future growth and physical development of a local jurisdiction. The comprehensive plan is a blueprint for housing, transportation, community facilities, utilities, and land use. It examines how the past led to the present and charts the community's future path.

Chapter 8A of the West Virginia Code establishes the scope and requirements of comprehensive plans. A comprehensive plan is required if a governing body wants to enact a zoning ordinance, enact a subdivision and land development ordinance, require plans and plats for land development, or issue improvement location permits for construction.

With regard to hazard mitigation planning, Section 8A-3-4 of the West Virginia Code requires comprehensive plans to include a plan for future land use, which, among other provisions, suggests that the comprehensive plan consider flood-prone and subsidence areas during development. The code also requires comprehensive plans to include a plan for community facilities and services and recommends considering storm drainage and floodplain management.

### Zoning Ordinances

Zoning ordinances allow for local communities to regulate the use of land in order to protect the interests and safety of the general public. Zoning ordinances can be designed to address unique conditions or concerns within a given community. They may be used to create buffers between structures and high-risk areas, limit the type or density of development, and/or require land development to consider specific hazard vulnerabilities. Zoning ordinances include both a map that delineates zoning districts and text documenting the regulations that apply in each zoning district.

Section 8A-7-1 of the West Virginia Code permits the governing body of a municipality or a county to regulate land within its jurisdiction through a zoning ordinance; the zoning ordinance may include identifying flood-prone areas and establishing regulatory controls regarding the permitted uses, type of construction, and height of the flood levels in these areas. The State does not require each local jurisdiction to adopt a zoning ordinance.

### Building Codes

Building codes are important in mitigation because codes are developed for regions of the country in consideration of the hazards present within that region. Structures that are built to applicable codes are inherently resistant to many hazards, such as strong winds, floods, and earthquakes, and can help mitigate regional hazards like wildfires. In 1990, West Virginia adopted the West Virginia State Building Code. The code protects public health and promotes the safety, protection, and sanitation of new and existing buildings and structures. It also protects financial investments and property values. If construction does not comply with the current recommended code, the structure may be at greater risk for damage and loss.

The code is not required to be adopted by local jurisdictions. However, if a jurisdiction decides to adopt the code, it must be adopted in one of the following methods: (1) adopt the code in its entirety, (2) adopt



only the International Property Maintenance Code (IPMC), or (3) adopt all parts of the code except the IPMC (WVU College of Law 2023).

### **Floodplain Management Ordinance**

Through administration of floodplain ordinances, municipalities can ensure that all new construction or substantial improvements to existing structures located in the floodplain are flood-proofed, dry-proofed, or built above anticipated flood elevations. Floodplain ordinances may also prohibit development in certain areas altogether. The NFIP establishes minimum ordinance requirements which must be met in order for that community to participate in the program. However, a community is permitted and encouraged to adopt standards that exceed NFIP requirements.

Section 7-1-3 of the West Virginia Code authorizes local jurisdictions to adopt and enforce floodplain regulations. Within West Virginia, 55 counties and 214 of the 231 incorporated communities have voluntarily adopted and are enforcing local floodplain management ordinances (WVEMD 2023).

### **Subdivision and Land Development**

West Virginia Code Section 8A-4 outlines guidance for creation and enactment of subdivision and land development ordinances (SALDOs). Relating to hazard mitigation, the code states SALDOs must include standards for flood-prone and subsidence areas and standards for setback requirements, lot sizes, streets, sidewalks, walkways, parking, easements, rights-of-way, drainage, utilities, infrastructure, curbs, gutters, streetlights, fire hydrants, stormwater management, and water and wastewater facilities. SALDOs are intended to regulate the development of housing, commercial, industrial, or other uses, including associated public infrastructure, as land is subdivided into buildable lots for sale or future development. Within these ordinances, guidelines on how land will be divided, the placement and size of roads, and the location of infrastructure can reduce exposure of development and infrastructure to hazard events.

### **Emergency Management**

An Emergency Operations Plan (EOP) is a document upon which the disaster operations of a county are formulated. It is concerned with all types of emergency situations and how they may develop, be prevented, and resolved. Consequently, these plans also account for activities before, during, and after emergency operations.

### **Stormwater Management**

The proper management of stormwater runoff can improve conditions and decrease the chance of flooding. Proper stormwater management planning results in sound engineering standards and criteria being incorporated into local codes and ordinances to manage stormwater runoff from new development in a coordinated, watershed-wide approach. Without such planning, stormwater is either not controlled by municipal or county ordinances or is addressed on a site-to-site or municipal boundary basis. Municipalities within the same watershed may require different levels of control of stormwater. The result is often the total disregard of downstream impacts or the compounding of existing flooding problems. Stormwater management plans are adopted in order to mitigate potential negative impacts from future land uses, improve the condition of impaired waterways, and address flooding associated with stormwater runoff.



## Other Plans

Numerous other plans and resources are also in place at the municipal and county level for topics such as economic development, snow removal, stream restoration, and green infrastructure. These types of plans can be implemented, amended, or repurposed to target hazard mitigation as well. For example, Section 7-1-3U of the WV Code authorizes counties and municipalities to rechannel and dredge streams and remove accumulated debris, snags, sandbars, rocks, and other kinds of obstructions to protect people and property from floods. Examples of further plan integration with the SHMP are provided in Table 7-1.

**Table 7-1 Opportunities for Plan Integration with SHMP**

Plan	Integration with SHMP
<p><b>Comprehensive Plans:</b>  <i>Community-wide plans that outline strategies for community development, to include housing, recreation, etc. Typically coordinated by a planning commission.</i></p>	<ul style="list-style-type: none"> <li>• Hazard mapping comparison with maps of targeted development areas</li> <li>• Hazard profiles inform risks at development areas</li> <li>• Plan development outside high-risk hazard areas and redirect to low-risk hazard areas</li> <li>• Support mitigation strategies for assets and events</li> </ul>
<p><b>Emergency Operations Plans:</b>  <i>Jurisdictional operating manual to guide emergency response activities to identified risks and threats.</i></p>	<ul style="list-style-type: none"> <li>• Identify and plan for operations in hazard areas</li> <li>• Hazard mapping informs high-risk areas</li> </ul>
<p><b>Transportation Planning:</b>  <i>Planning effort that describes transportation infrastructure needs, to include new construction and upgrades.</i></p>	<ul style="list-style-type: none"> <li>• Identification of high-risk hazard areas that affect transportation</li> <li>• Encourage sustainable and resilient construction</li> </ul>
<p><b>Floodplain Management:</b>  <i>Regulations and outreach materials related to management of the National Flood Insurance Program (NFIP).</i></p>	<ul style="list-style-type: none"> <li>• Identification of floodplains and at-risk buildings</li> <li>• Directing development to non-flood hazard areas</li> <li>• Encouraging protection of green spaces</li> <li>• Minimize impacts of flooding from rivers and streams</li> </ul>
<p><b>Infrastructure Development Plans:</b>  <i>Similar to transportation plans, documents that describe water, sewer, electric, gas/propane, broadband, etc. needs in a community. Documents typically identify underserved areas and specify an action plan for strengthening access to services in those areas.</i></p>	<ul style="list-style-type: none"> <li>• Guide development away from hazard areas</li> <li>• Improve infrastructure affected by hazards</li> <li>• Encourage sustainable and resilient construction</li> </ul>
<p><b>Commercial and Economic Development:</b>  <i>Plans and project lists that specific targeted types of development in specific areas. Typically maintained by economic development authorities and may be presented as lists of available properties.</i></p>	<ul style="list-style-type: none"> <li>• Identify suitable development or redevelopment areas</li> <li>• Encourage responsible land use according to area hazards</li> </ul>
<p><b>Stormwater Management:</b>  <i>Plans for updating and upgrading stormwater infrastructure. Examples include separating combined sewer overflow (CSO) systems or increasing the capacities of those systems. Green infrastructure and low-impact development solutions may also be examples.</i></p>	<ul style="list-style-type: none"> <li>• Identify hazards relating to stormwater management</li> <li>• Minimize impacts of flooding due to stormwater</li> </ul>

## ADMINISTRATIVE AND TECHNICAL CAPABILITIES

Administrative capability is described by the adequacy of departmental and personnel resources for the implementation of mitigation-related activities. Technical capability relates to the adequacy of knowledge



and technical expertise of local government employees or the ability to contract outside resources for this expertise in order to effectively execute mitigation activities. Common examples of skillsets and technical personnel needed for hazard mitigation include planners with knowledge of land development/management practices, engineers or professionals trained in construction, and emergency management professionals.

### **Engineers**

Engineers perform duties as directed in the areas of construction, reconstruction, maintenance, and repair of streets, roads, pavements, sanitary sewers, bridges, culverts, and other engineering work. The municipal engineer reviews and/or prepares plans, specifications, and estimates of the work undertaken within the jurisdiction. These staff members will design the communities and structures with hazard impacts in mind, resulting in more sustainable communities and stronger structures.

### **Floodplain Administrators**

Floodplain administrators are experts in the rules and regulations of development in a floodplain and can provide vast amounts of information on the risks and impacts of building within those hazard areas. They are an integral part of the mitigation planning team and can make recommendations based on the needs and conditions of the community.

### **Office of Emergency Management**

Offices of Emergency Management coordinate countywide emergency management efforts. They are responsible for managing activities that aim to reduce the loss and lives and property and protect the environment from the effects of natural or man-made disasters, catastrophes, or terrorist threats through prevention, mitigation, preparedness, response, and recovery efforts.

### **Planning and Zoning Department**

The Planning Commission acts as an advisory group to the municipal governing body on issues and policies related to planning, land use regulation, and community development and performs other duties as outlined in the West Virginia Code Section 8A-2-3. The Zoning and Planning Department is responsible for administering the City's Comprehensive Plan, Stormwater Ordinance, Zoning Ordinance, and Subdivision Ordinance.

### **Emergency Communications**

Emergency Communications serve residents and businesses across the region with various types of emergency and non-emergency situations. This office is the primary contact for those needing police, ambulance, or fire assistance.

## **FINANCIAL CAPABILITIES**

Financial capability is important to the implementation of hazard mitigation activities. Every jurisdiction must operate within the constraints of limited financial resources. There are also numerous partnering opportunities and grant programs available to assist in offsetting the expenses of local hazard mitigation efforts. While some mitigation actions are less costly than others, it is important that money is available locally to implement policies and projects. Financial resources are particularly important if communities



are trying to take advantage of State or federal mitigation grant funding opportunities that require local-match contributions. After the COVID-19 pandemic, communities across the country faced new challenges in balancing community economic recovery while also implementing hazard mitigation.

### **Capital Improvement Program**

The most common fiscal tool available to communities is the Capital Improvement Program (CIP). A CIP is a community planning and fiscal management tool used to coordinate the timing and financing of capital improvements over a multi-year period. A CIP includes a prioritized list of improvements to roads, parks, and other facilities that the community plans to undertake in a given period.

### **Community Development Block Grants**

The Community Development Block Grant (CDBG) program is designed to assist vulnerable populations within the community by ensuring affordable housing, creating jobs, and providing direct services. The amount of each grant is determined by a formula that accounts for the community's need, poverty, population, housing, and comparison to other areas. The annual appropriation is divided among the states and local jurisdictions. The majority of CDBG funds are required to be spent to benefit low- and moderate-income citizens.

## **EDUCATION AND OUTREACH**

Education and outreach programs and methods are used to implement mitigation activities and communicate hazard-related information. These methods provide an opportunity to inform the public about the risk present within the community and measures that may be taken to reduce or eliminate the risk.

### **Firewise® USA Program**

The National Fire Protection Association (NFPA) administers the Firewise USA® Program to encourage local solutions for safety by involving homeowners in taking individual responsibility for protecting their homes against the risk of wildfire. The program provides resources to help homeowners learn how to adapt to living with wildfire and encourages neighbors to work together to take action to prevent losses. The program, aimed at homeowners, provides specific criteria for communities regarding wildfire preparedness and offers national recognition for their work.

### **StormReady®**

StormReady® is an education and outreach program that helps arm communities with the communication and safety skills needed to save lives and property before, during, and after an event. The program encourages communities to take a new, proactive approach to improving local hazardous weather operations by providing guidelines on improving hazardous weather operations. To be an official StormReady® community, a community must meet the following criteria:

- Establish a 24-hour warning point and emergency operations center;
- Have more than one way to receive severe weather warnings and forecasts and to alert the public;
- Create a system that monitors weather conditions locally;
- Promote the importance of public readiness through community seminars; and





- Develop a formal hazardous weather plan, which includes training severe weather spotters and holding emergency exercises.

### **National Oceanic and Atmospheric Administration (NOAA) Weather-Ready Nation Ambassador**

NOAA WRN Ambassador is a designation that recognizes NOAA partners that are improving resilience against extreme weather events. Partners help unify efforts across government, non-profits, academia, and private industry toward making the community and the nation more weather-ready. NOAA WRN Ambassadors carry out the following activities:

- Promote Weather-Ready Nation messages and themes to their stakeholders;
- Engage with NOAA personnel on potential collaboration opportunities;
- Share their success stories of preparedness and resiliency; and
- Serve as an example by educating employees on workplace preparedness.

NOAA supports NOAA WRN Ambassadors by:

- Providing outreach content about creating a Weather-Ready Nation;
- Exploring innovative approaches for collaboration; and
- Assisting with StormReady opportunities.

Table 7-2 includes a summary of local foundational capabilities relevant to hazard mitigation identified and discussed in LHMPs. It is important to note that the absence of a capability does not mean that the capability does not exist in the local jurisdiction. It simply means that no discussion was found describing or identifying the capability in the LHMPs. This suggests that the capability may not be used to its full potential to support mitigation within the county, or it may suggest that the department or agency responsible for implementing the capability may not have been fully involved in the LHMP planning process.

In addition, it is important to note that codes, regulations, and/or plans may have been updated or developed since the time of the LHMP publication. In addition, please note that some of the capabilities included are local-level capabilities, while others are State programs and/or regulations. In addition, many aspects of these foundational capabilities and changes that may have occurred over the last several years are discussed in the detailed tables supporting the State Capability Assessment described above (see Section 6 [State Capabilities]).





**Table 7-2 Foundational Capabilities as Identified in Local Hazard Mitigation Plans**

Jurisdiction	Comprehensive Plan	Building Codes	Participation in NFIP	Subdivision Ordinance	Zoning Ordinance	Capital Budget funds for Mitigation Projects	Public Works Budget for Mitigation Projects
<b>Region 1</b>							
<b>McDowell County</b>	X	X	-	X	-	-	-
Anawalt (T)	X	X	-	X	-	-	-
Bradshaw (T)	X	X	-	-	-	-	-
Davy (T)	X	-	-	-	-	-	-
Gary (C)	X	-	-	-	-	-	-
laeger (T)	X	-	-	-	-	-	-
Keystone (C)	X	-	-	-	-	-	-
Kimball (T)	X	-	-	-	-	-	-
Northfork (T)	X	-	-	-	-	-	-
War (C)	X	X	-	-	X	-	-
Welch (C)	X	-	-	X	-	-	-
<b>Mercer County</b>	X	-	-	-	-	-	-
Athens (T)	X	-	-	-	X	-	-
Bluefield (C)	X	X	-	X	X	-	-
Bramwell (T)	X	-	-	-	-	-	-
Oakvale (T)	X	-	-	-	-	-	-
Princeton (C)	X	X	-	X	X	-	-
<b>Monroe County</b>	X	-	-	-	-	-	-
Peterstown (T)	X	-	-	-	-	-	-



Jurisdiction	Comprehensive Plan	Building Codes	Participation in NFIP	Subdivision Ordinance	Zoning Ordinance	Capital Budget funds for Mitigation Projects	Public Works Budget for Mitigation Projects
Union (T)	X	-	-	-	-	-	-
<b>Raleigh County</b>	X	-	-	-	-	-	-
Beckley (C)	X	-	-	-	-	-	-
Lester (T)	-	-	-	-	-	-	-
Mabscott (T)	-	-	-	-	-	-	-
Sophia (T)	X	X	-	-	X	-	-
<b>Summers County</b>	X	X	-	-	X	-	-
Hinton (C)	X	-	-	-	-	-	-
<b>Wyoming County</b>	X	-	-	-	-	-	-
Mullens (C)	X	-	-	-	-	-	-
Oceana (T)	X	-	-	-	-	-	-
Pineville (T)	X	-	-	-	-	-	-
<b>Region 2</b>							
<b>Cabell County</b>	X	X	X	-	-	-	-
Huntington (C)	X	X	X	X	X	-	-
<b>Lincoln County</b>	X	-	X	-	-	-	-
<b>Logan County</b>	X	-	X	-	-	X	-
<b>Mason County</b>	X	X	X	-	-	-	-
<b>Wayne County</b>	X	-	X	-	-	-	-
<b>Region 3</b>							
<b>Boone County</b>	-	X	X	-	-	-	-



Jurisdiction	Comprehensive Plan	Building Codes	Participation in NFIP	Subdivision Ordinance	Zoning Ordinance	Capital Budget funds for Mitigation Projects	Public Works Budget for Mitigation Projects
Danville (T)	-	-	X	-	-	-	-
Madison (C)	-	X	X	-	X	-	-
Sylvester (T)	-	-	X	-	-	-	-
Whitesville (T)	-	X	X	-	-	-	-
<b>Clay County</b>	-	X	X	-	-	-	-
Clay (T)	-	-	X	-	-	-	-
<b>Kanawha County</b>	-	X	X	-	-	-	-
Belle (T)	-	X	X	-	-	-	-
Cedar Grove (T)	X	-	X	-	-	-	-
Charleston (C)	X	-	X	-	-	-	-
Chesapeake (T)	-	-	X	-	-	-	-
Clendenin (T)	-	-	X	-	-	-	-
Dunbar (C)	-	X	X	-	-	-	-
East Bank (T)	X	X	X	-	-	-	-
Glasgow (T)	-	-	-	-	-	-	-
Handley (T)	-	X	X	-	-	-	-
Marmet (C)	X	-	X	-	-	-	-
Nitro (C)	X	-	X	-	-	-	-
South Charleston (C)	-	X	X	-	-	-	-
St. Albans (C)	X	X	X	-	-	-	-
<b>Putnam County</b>	X	X	X	-	-	-	-



Jurisdiction	Comprehensive Plan	Building Codes	Participation in NFIP	Subdivision Ordinance	Zoning Ordinance	Capital Budget funds for Mitigation Projects	Public Works Budget for Mitigation Projects
Bancroft (T)	-	-	X	-	X	-	-
Buffalo (T)	-	-	X	-	X	-	-
Eleanor (T)	-	-	X	-	-	-	-
Hurricane (C)	-	X	X	-	X	-	-
Poca (T)	X	X	X	-	X	-	-
Pratt (T)	-	X	X	-	-	-	-
Winfield (T)	-	X	X	-	-	-	-
<b>Region 4</b>							
<b>Fayette County</b>	X	X	X	-	-	-	-
Ansted (T)	-	-	X	-	X	-	-
Fayetteville (T)	X	-	X	-	-	-	-
Gauley Bridge (T)	-	-	X	-	-	-	-
Meadow Bridge (T)	-	-	X	-	-	-	-
Montgomery (C)	-	-	X	-	X	-	-
Mount Hope (C)	-	-	X	-	X	-	-
Oak Hill (C)	X	-	X	-	X	-	-
Pax (T)	-	-	X	-	X	-	-
Smithers (C)	-	-	X	-	X	-	-
Thurmond (T)	-	-	-	-	-	-	-
<b>Greenbrier County</b>	X	-	X	X	X	-	-
Alderson (T)	-	-	X	-	X	-	-



Jurisdiction	Comprehensive Plan	Building Codes	Participation in NFIP	Subdivision Ordinance	Zoning Ordinance	Capital Budget funds for Mitigation Projects	Public Works Budget for Mitigation Projects
Lewisburg (C)	X	-	X	-	X	-	-
Quinwood (T)	-	-	X	-	-	-	-
Rainelle (T)	-	-	X	-	X	-	-
Renick (C)	X	-	X	-	-	-	-
Ronceverte (C)	-	-	X	-	X	-	-
Rupert (T)	-	-	X	-	X	-	-
White Sulphur Springs (C)	-	-	X	-	X	-	-
<b>Nicholas County</b>	-	-	X	-	-	-	-
Richwood (C)	-	-	X	-	X	-	-
Summersville (T)	X	-	X	-	X	-	-
<b>Pocahontas County</b>	-	-	X	-	-	-	-
Durbin (T)	-	-	X	-	-	-	-
Hillsboro (T)	-	-	X	-	-	-	-
Marlinton (T)	-	-	X	-	X	-	-
<b>Webster County</b>	X	-	X	-	-	-	-
Camden-on-Gauley (T)	-	-	X	-	-	-	-
Cowen (T)	-	-	X	-	-	-	-
Webster Springs (T)	-	-	X	-	X	-	-
<b>Region 5</b>							
<b>Calhoun County</b>	X	X	X	-	-	-	-
Grantsville (T)	X	X	X	-	-	-	-



Jurisdiction	Comprehensive Plan	Building Codes	Participation in NFIP	Subdivision Ordinance	Zoning Ordinance	Capital Budget funds for Mitigation Projects	Public Works Budget for Mitigation Projects
<b>Jackson County</b>	-	X	X	-	-	-	-
Ravenswood (C)	X	X	X	-	X	X	X
Ripley (C)	-	X	X	-	X	-	-
<b>Pleasants County</b>	-	X	X	-	-	-	-
Belmont (C)	-	X	X	-	-	-	-
St. Mary's (C)	-	X	X	-	X	-	-
<b>Ritchie County</b>	-	X	X	-	-	-	-
Auburn (T)	-	X	X	-	-	-	-
Cairo (T)	-	X	X	-	-	-	-
Ellenboro (T)	-	X	X	-	-	-	-
Harrisville (T)	-	X	X	-	-	-	-
Pennsboro (C)	-	X	X	-	X	-	-
Pullman (T)	-	X	X	-	-	-	-
<b>Roane County</b>	-	X	X	-	-	-	-
Reedy (T)	-	X	X	-	-	-	-
Spencer (C)	X	X	X	-	X	-	-
<b>Tyler County</b>	-	X	X	-	-	-	-
Friendly (T)	-	X	X	-	-	-	-
Middlebourne (T)	-	X	X	-	-	-	-
Paden (C)	-	X	X	-	X	-	-
Sistersville (C)	-	X	X	-	-	-	-



Jurisdiction	Comprehensive Plan	Building Codes	Participation in NFIP	Subdivision Ordinance	Zoning Ordinance	Capital Budget funds for Mitigation Projects	Public Works Budget for Mitigation Projects
<b>Wirt County</b>	-	X	X	-	-	-	-
<b>Wood County</b>	X	X	X	-	-	-	-
North Hills (T)	-	X	-	-	-	-	-
Parkersburg (C)	X	X	X	-	X	X	X
Vienna (C)	X	X	X	-	X	-	-
Williamstown (C)	-	X	X	-	X	-	-
<b>Region 6</b>							
N/A							
<b>Region 7</b>							
<b>Barbour County</b>	X	-	-	-	-	-	-
Belington (T)	-	-	-	-	X	-	-
Junior (T)	-	-	-	-	-	-	-
Philippi (C)	X	X	-	-	X	-	-
<b>Braxton County</b>	X	-	-	-	-	-	-
Burnsville (T)	-	-	-	-	-	-	-
Flatwoods (T)	-	-	-	-	-	-	-
Gassaway (T)	-	-	-	-	-	-	-
Sutton (T)	-	-	-	-	-	-	-
<b>Gilmer County</b>	X	X	-	-	-	-	-
Glennville (T)	-	-	-	-	-	-	-
Sand Fork (T)	-	-	-	-	-	-	-





Jurisdiction	Comprehensive Plan	Building Codes	Participation in NFIP	Subdivision Ordinance	Zoning Ordinance	Capital Budget funds for Mitigation Projects	Public Works Budget for Mitigation Projects
<b>Lewis County</b>	X	-	-	-	-	-	-
Jane Lew (T)	-	X	-	-	-	-	-
Weston (C)	-	X	-	-	-	-	-
<b>Randolph County</b>	X	-	-	-	-	-	-
Beverly (T)	X	-	-	-	-	-	-
Coalton (T)	-	-	-	-	-	-	-
Elkins (C)	-	X	-	-	X	-	-
Harman (T)	X	X	-	-	-	-	-
Huttonsville (T)	-	-	-	-	-	-	-
Mill Creek (T)	-	-	-	-	-	-	-
Montrose (T)	-	-	-	-	-	-	-
<b>Tucker County</b>	X	-	-	-	-	-	-
Davis (T)	-	-	-	-	-	-	-
Hambleton (T)	-	-	-	-	-	-	-
Hendricks (T)	-	-	-	-	-	-	-
Parsons (C)	X	X	-	-	-	X	-
Thomas (C)	X	-	-	-	-	-	-
<b>Upshur County</b>	-	X	-	-	-	-	-
Buckhannon (C)	X	X	-	-	X	X	-
<b>Region 8</b>							
<b>Grant County</b>	X	-	X	X	-	-	-



Jurisdiction	Comprehensive Plan	Building Codes	Participation in NFIP	Subdivision Ordinance	Zoning Ordinance	Capital Budget funds for Mitigation Projects	Public Works Budget for Mitigation Projects
Bayard (T)	-	X	X	-	-	-	-
<b>Hampshire County</b>	X	X	X	X	-	-	-
Romney (C)	-	-	X	-	X	-	-
<b>Hardy County</b>	X	-	X	X	X	-	-
Moorefield (C)	X	X	X	X	X	-	X
Wardensville (T)	X	-	X	-	X	-	-
<b>Mineral County</b>	X	-		X	-	-	-
Keyser (C)	-	-	X	-	-	-	-
Piedmont (C)	-	X	X	-	-	-	-
<b>Pendleton County</b>	-	-	X	-	-	-	-
Franklin (T)	X	X	X	-	-	-	-
<b>Region 9</b>							
<b>Berkeley County</b>	X	X	X	X	X	-	-
Hedgesville (T)	-	X	-	-	-	-	-
Martinsburg (C)	X	X	X	X	X	-	-
<b>Morgan County</b>	X	X	X	X	-	-	-
Bath (T)	X	X	X	X	-	-	-
Paw Paw (T)	-	-	X	-	X	-	-
<b>Region 10</b>							
N/A							
<b>Region 11</b>							



Jurisdiction	Comprehensive Plan	Building Codes	Participation in NFIP	Subdivision Ordinance	Zoning Ordinance	Capital Budget funds for Mitigation Projects	Public Works Budget for Mitigation Projects
<b>Brooke County</b>	X	X	-	-	X	-	-
Beech Bottom (V)	-	X	-	-	-	-	-
Bethany (T)	-	X	-	-	-	-	-
Follansbee (C)	X	X	-	-	X	-	-
Wellsburg (C)	-	X	-	-	-	-	-
Windsor Heights (V)	-	X	-	-	-	-	-
<b>Hancock County</b>	-	X	-	-	X	-	-
Chester (C)	-	X	-	-	-	-	-
New Cumberland (C)	-	X	-	-	-	-	-
Wierton (C)	X	X	-	-	X	-	-
<b>Jefferson County</b>							
<b>Jefferson County</b>	X	X	X	X	X	-	-
Bolivar (T)	X	X	-	X	X	-	-
Charles Town (C)	X	X	X	X	X	-	-
Harpers Ferry (T)	X	X	X	X	X	-	-
Ranson (C)	X	X	X	X	X	X	X
Shepherdstown (T)	X	X	X	X	X	X	X

Note: X = Capability discussed in hazard mitigation plan; information presented in this table reflects information as it is presented in the County hazard mitigation plans unless otherwise noted. Codes, regulations, and/or plans may have been updated since the time of their publication.

“ - “ = Capability not discussed or identified in hazard mitigation plan.

T = Town

C = City



## 7.2.2 County Floodplain Management

Community participation in the NFIP allows for property owners to obtain flood insurance providing a means for homeowners, renters, and business owners to financially protect themselves. This capability greatly improves resilience after a flood hazard event by allowing residents to repair and rebuild. For a community to participate in the NFIP, it must adopt and enforce floodplain management regulations that meet or exceed the minimum NFIP standards and requirements. These standards are intended to prevent loss of life and property as well as economic and social hardships that result from flooding. Once FEMA provides communities with flood hazard information upon which floodplain management regulations are based, the community is required to adopt a floodplain ordinance that meets or exceeds the minimum NFIP requirements. All NFIP participating communities in the region have either adopted a stand-alone ordinance or have arranged for county administration of floodplain regulations.

The NFIP's Community Rating System (CRS) provides discounts on flood insurance premiums in those communities that establish floodplain management programs that go beyond NFIP minimum requirements. Under the CRS, communities receive credit for higher regulatory standards; acquisition, relocation, or flood-proofing of flood-prone buildings; preservation of open space; and other measures that reduce flood damage or protect the natural resources and functions of floodplains. Local NFIP and CRS participation is documented in detail in the LHMPs. Within West Virginia, 13 communities participate in CRS, as shown in Table 7-3.

Under the CRS, flood insurance premium rates are adjusted to reflect the reduced flood risk resulting from community activities that meet a minimum of three of the following CRS goals:

- Reduce flood losses
- Reduce damage to property
- Protect public health and safety
- Prevent increases in flood damage from new construction
- Reduce the risk of erosion damage
- Protect natural and beneficial floodplain functions
- Facilitate accurate insurance rating
- Promote awareness of flood insurance

There are 10 CRS classes that provide varied reduction in insurance premiums for property owners in both the Special Flood Hazard Area (SFHA) and non-SFHA. Class 1 requires the most credit points and gives the largest premium reduction; Class 10 receives no premium reduction. CRS premium discounts on flood insurance range from 5 percent for Class 9 communities up to 45 percent for Class 1 communities. The CRS recognizes 19 creditable activities that are organized under four categories: Public Information, Mapping and Regulations, Flood Damage Reduction, and Flood Preparedness.



*Table 7-3 CRS Community Rating*

Jurisdiction	CRS Class	Jurisdiction	CRS Class	Jurisdiction	CRS Class
Berkeley County	7	Hampshire County	8	Morgan County	9
Buckhannon	8	Jefferson County	7	Parsons	8
Charleston	9	Kanawha	9	Philippi	8
Fayette County	9	Martinsburg	8	Putnam County	9
Greenbrier County	9				

Source: CRSVIZ 2023

### 7.2.3 Evaluation of Local Hazard Mitigation Plans

Counties have identified, evaluated, and developed capabilities to mitigate risk from natural hazards. These capabilities are discussed in LHMPs and serve as the basis for the implementation of many actions. A review of the LHMPs was conducted to:

- Determine how counties are evaluating the effectiveness of their plans;
- Determine challenges, barriers, and unmet needs the counties have identified in reaching their mitigation goals; and
- Identify opportunities to address challenges and leverage existing capabilities.

A review of the LHMPs reveals that there is limited discussion of the effectiveness of the overall plan; however, localities do evaluate the effectiveness of past mitigation actions. A summary of the results of the review is provided in the sections that follow. The results of this assessment were used by the State to develop its mitigation strategy for the 2023 SHMP.

#### **CHALLENGES AND BARRIERS TO EFFECTIVE LOCAL HAZARD MITIGATION**

A number of challenges and barriers to implementing effective mitigation actions were identified in LHMPs. A summary of these challenges and barriers follows; however, it should be noted that the following section (Emerging Local Capabilities) discusses progress on how some of these challenges are currently being addressed:

- **Sources of Funding for Cost-Share** — Projects and actions that receive grants that require a cost-share were less likely to be implemented in counties and regions due to lack of funding from localities.
- **Coordination and Collaboration** — Coordination and collaboration among county, region, and State agencies are needed to implement large-scale projects successfully. Keeping shared information updated, such as a Floodplain Manager List is important in maintaining effective communication to provide consistent policy enforcement.
- **Downturn of the Manufacturing Industry** — The decline of the coal industry contributes to unemployment as well as limited growth and use of manufacturing infrastructure, which is contributing to outmigration and an increase in vacant properties. Increasing vacant properties presents a challenge to code enforcement.



- **Frequent Floodplain Manager Turnover** — Local and regional floodplain managers are consistently changing, making it extremely difficult to successfully complete projects and carry out proper code enforcement and documentation of infrastructure located in the floodplain. Additionally, this makes it difficult for the State to stay current with documented floodplain manager training hours.
- **Fast-Track Hazard Mitigation Plans** — A few regional plans have had to be fast-tracked in order to prevent a region from having a plan expire. Fast-tracking these plans has limited the number of opportunities for broader participation throughout the region.
- **Vulnerable Structures** — Many structures across the West Virginia were constructed without an enforced building code. Many of these buildings are currently located in a floodplain, and mechanisms/enforcement for making these structures less vulnerable are limited and may be cost-prohibitive to owners.
- **Educational Outreach and Technical Trainings** — Many people who work at the local level do not have full training on how to create a website or send out emergency warnings through an alert system. There is a desire to have a full statewide training where members of counties and regions are invited to learn how to coordinate and collaborate these tasks.

### **OPPORTUNITIES TO ADDRESS LOCAL CHALLENGES AND LEVERAGE CAPABILITIES**

The following are some of the opportunities identified in local hazard mitigation plans to address challenges and leverage capabilities. It should be noted that the following section (Emerging Local Capabilities) discusses the status of some efforts to capture these opportunities:

- **Evaluating Potential Future Conditions** — Discussing the future of the economy, environment, demographics, and built environment help communities prepare for future hazard events through calculated projections.
- **State Resources and Assistance Support County Efforts** — The State provides a number of technical resources and programs that support counties in their hazard mitigation efforts, including the well-known West Virginia Geographic Information Systems (GIS) Technical Center (WVU GISTC).
- **Successful Outreach Efforts** — Local planning efforts have created programs to provide data and information that improves residents' preparation against certain hazards of concern. Some communities have started connecting with repetitive loss property owners to create plans of action of how to mitigate their properties.
- **RPDC Projects** — Regional projects offer opportunities to support mitigation efforts at the community level. Region-wide projects that support communication/broadband development reinforce connectivity to critical facilities. Hazard mitigation benefits are considered when looking at criteria for projects.
- **Opportunities for Partnerships** — Forming partnerships with stakeholders, community organizations, and non-profit organizations can maximize limited financial resources. Most counties already work together to have a shared LHMP and can work together to further share funding and staffing in order to complete more projects and be better prepared against hazards.



## 7.2.4 Emerging Local Capabilities

In the years since the counties' local hazard mitigation plans have been developed, there have been advances in the understanding and development of strategies to address community resilience and future conditions. A few emerging capabilities in these areas include:

- **Disaster Mass Notification System** — Region 9 opted into a mass notification system that warns residents of potential incoming weather events so that they may be better prepared and equipped to handle the event. This notification system also sends communities information on how to prepare for other potential threats.
- **Floodplain Ordinances** — Region 4 revised and adopted all floodplain ordinances. The purpose of updating the ordinances was to ensure that development was regulated within the 100-year floodplain. All ordinances have been posted to their respective websites, and the public was notified of the requirements.
- **Emergency Shelters** — Ohio County, in the Region 10 RPDC, has secured adequate emergency power resources for all emergency shelters.
- **Stormwater Programs** — Region 6 started an ongoing action of re-vegetation in bare ground areas that are susceptible to erosion to stabilize the area. The region was able to secure funding for the re-vegetation.
- **CERT Team** — Region 11 was able to establish a Community Emergency Response Team as well as increase the number of citizen emergency responders that are trained.
- **Landslide Maps** — Region 7 undertook efforts to map areas of subsidence and landslides in order to distribute information to the public. Digital interactive maps were established, and links were distributed to the public.