



SECTION 6. STATE CAPABILITY ASSESSMENT

2023 SHMP UPDATE CHANGES

- ❖ Discussion of the administration of hazard mitigation capabilities and programs has been revised and updated to reflect significant changes in the structure of emergency management since the 2018 State Hazard Mitigation Plan (SHMP).
- ❖ State capabilities have been comprehensively reviewed, updated, and reformatted.
- ❖ The capabilities part has been broken out into three separate sections.

6.1 Administration of Hazard Mitigation Programs in the State

The purpose of this section is to provide a comprehensive review and evaluation of the State of West Virginia's (the State) capabilities to support and facilitate mitigation activities and to describe the process utilized by the State to support, promote, coordinate, and implement mitigation planning, policies, programs, and projects at the regional, county, and local levels.

The West Virginia Emergency Management Division (WVEMD) coordinates emergency management activities support the State's mission of ensuring protection of life and property by providing coordination, guidance, support, and assistance to local emergency managers and first responders. Established by West Virginia State Code and operating under the West Virginia Emergency Operations Plan, the WVEMD manages disaster preparedness, mitigation, and response and recovery efforts throughout the state by coordinating with all responsible government agencies. Within WVEMD, there are multiple branches that work together to achieve the overall mission of the division.

West Virginia is a part of Federal Emergency Management Agency's (FEMA) Region 3 along with Delaware, Maryland, Pennsylvania, the District of Columbia, and Virginia. Region 3 identifies four primary steps to developing a plan:

1. Organizing the planning process and resources
2. Assess risks and capabilities
3. Develop a mitigation strategy
4. Adopt, maintain, and implement the plan (FEMA 2021)

Capabilities provide the means to accomplish a desired outcome. In the context of mitigation planning, the State capability assessment identifies the State's abilities to reduce risk and increase resilience from hazards. It addresses how the State's existing capabilities can aid the mitigation effort and areas where the State needs to strengthen its mitigation capabilities.



6.2 Identification and Evaluation of State Pre- and Post-Disaster Capabilities

44 C.F.R. §201.4(c)(3)(ii): [The State Plan must include] ...a discussion of the State’s pre- and post-disaster hazard management policies, programs, and capabilities to mitigate the hazards in the areas, including: an evaluation of State laws, regulations, policies, and programs related to hazard mitigation as well as to development in hazard-prone areas; a discussion of State funding capabilities for hazard mitigation projects

This section identifies and evaluates the State’s pre- and post-disaster capabilities, including legal, regulatory, and programmatic capabilities, participation in national programs, and funding capabilities. Regional, county, and local capabilities are discussed in Section 7 (Local Capability Assessment).

6.2.1 State Pre- and Post-Disaster Capabilities and Core Mitigation Capabilities

The National Preparedness Goal defines what it means for the whole community to be prepared for all types of disasters and emergencies, identifying five mission areas – prevention, protection, mitigation, response and recovery. Under the mitigation mission area there are seven core capabilities identified (FEMA 2020):

- **Threats & Hazard Identification** — Identify the threats and hazards that occur in the geographic area; determine the frequency and magnitude; and incorporate this into analysis and planning processes so as to clearly understand the needs of a community or entity.
- **Risk & Disaster-Resilient Assessment** — Assess risk and disaster resilience so that decision-makers, responders, and community members can take informed action to reduce their entity’s risk and increase their resilience.
- **Planning** — Conduct a systematic process engaging the whole community as appropriate in the development of executable strategic, operational, and/or tactical-level approaches to meet defined objectives.
- **Community Resilience** — Enable the recognition, understanding, communication of, and planning for risk and empower individuals and communities to make informed risk management decisions necessary to adapt to, withstand, and quickly recover from future incidents.
- **Public Information & Warning** — Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard and, as appropriate, the actions being taken, and the assistance being made available.
- **Long-term Vulnerability Reduction** — Build and sustain resilient systems, communities, and critical infrastructure and key resources lifelines so as to reduce their vulnerability to natural, technological, and human-caused threats and hazards by lessening the likelihood, severity, and duration of the adverse consequences.
- **Operational Coordination** — Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

The following sections include reviews of pre- and post-disaster hazard management capabilities (e.g., responsibilities, programs, and initiatives) and development of guidance offered through agencies and programs



that directly support WVEMD’s and FEMA’s hazard mitigation efforts. A more detailed discussion on WVEMD’s pre- and post-disaster programs and capabilities is presented following this summary.

6.2.2 Legal, Regulatory, Planning, and Programmatic Capabilities

An evaluation of State laws, regulations, policies, and programs related to hazard mitigation that improve or impede resilience to future hazard events, including the potential effects of future hazard conditions is provided in this capability section.

In coordination with the WVEMD, state departments and agencies conducted a thorough review of laws, rules, plans and programs to identify and evaluate their hazard mitigation-related capabilities, including those related to development in hazard-prone areas. Each identified capability was described, significant changes that occurred during the performance period of the 2018 SHMP were noted, and opportunities or challenges to enhance capability effectiveness or minimize conflicts with mitigation goals were discussed. In addition, reviewers identified the hazard(s) of concern that each capability helps to mitigate, the type of hazard management capability (pre-and/or post-disaster), and the effect on loss reduction. While some funding capabilities were identified in this discussion, funding is discussed in more detail in Section 6.2.4.

Key Term

Mitigation Capabilities provide the means to accomplish desired mitigation outcomes. Capabilities include laws, regulations, policies, programs, administrative and technical staffing and resources, funding, and people-powered capabilities, such as volunteer groups.

In order to support program and plan integration, each capability was also assessed to determine the mitigation mission area core capabilities that it supports. Core capabilities are identified in the National Preparedness Goal and are used in other emergency management programs, including the Threat and Hazard Identification and Risk Assessment (THIRA) and the State Preparedness Report.

Table 6-1 identifies the state agencies and programs with capabilities to reduce vulnerability to the hazards of concern described in Section 5 (Hazard Profiles).



Table 6-1. State Agencies and Programs with Hazard Mitigation Capabilities by Hazard of Concern

Agency	Hazards of Concern															
	Dam Failure	Drought	Earthquake	Extreme Temperature	Flood	Hazardous Materials	Landslide	Levee Failure	Pandemic	Radiological Incidents	Radon Exposure	Severe Storm	Subsidence	Utility Failure	Wildfire	Winter Weather
WV Department of Agriculture	X	X		X	X							X			X	X
WV Conservation Agency	X	X			X	X	X					X	X		X	
WV Emergency Management Division	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WV Department of Environmental Protection	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WV Office of Environmental Health Services	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WV State Fire Commission			X	X	X		X				X	X	X	X	X	X
WV Board of Registration for Foresters															X	
WV Division of Forestry															X	
WV Geological and Economic Survey			X				X						X			
WV Division of Highways	X		X		X		X	X				X	X	X	X	X
WV Office of Miners' Health, Safety and Training													X			
WV Division of Natural Resources	X	X	X	X	X	X	X	X				X	X	X	X	X
WV Division of Water and Waste Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WV Water Development Authority	X	X			X			X		X						
WV State Resiliency Office	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WV Office of Emergency Medical Services									X							
WV University National Environmental Services Center	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WV Department of Education	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WV Flood Protection Task Force	X				X			X				X				



Agency	Hazards of Concern															
	Dam Failure	Drought	Earthquake	Extreme Temperature	Flood	Hazardous Materials	Landslide	Levee Failure	Pandemic	Radiological Incidents	Radon Exposure	Severe Storm	Subsidence	Utility Failure	Wildfire	Winter Weather
WV Flood Tool	X				X			X				X				
WV GIS Technical Center	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WV and Virginia Water Science Center	X	X			X		X	X				X	X	X		X
WV Board of Risk & Insurance Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WV Public Service Commission	X	X	X	X	X	X	X	X				X	X	X	X	X
WV Silver Jackets	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WV Hazard Mitigation Joint Planning Committee	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WV Emerging Response Commission	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WV Office of Abandoned Mine Lands and Reclamation							X					X	X			
WV Office of Environmental Remediation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WV Office of Special Reclamation					X		X						X			
WV Division of Land Restoration										X						
WV Office of Environmental Advocate	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WV Rehabilitation Environmental Action Plan	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WV Environmental Equity Policy	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X



LAND USE AND DEVELOPMENT

State Building Code

The purpose of the building code is to establish the minimum requirements to provide a level of safety, public health, and general welfare through structural strength, stability, ventilation, and safety of life and property from hazards, as well as a reasonable level of safety to firefighters and emergency responders during emergency operations. The Department of Building Safety is created, and a building official is appointed by each jurisdiction in which the building code has been adopted who is authorized to enforce the building code through policies and procedures to carry out the intent and purpose of the regulation (West Virginia 2019).

While West Virginia does not have statewide building code requirements, the adoption and implementation of building codes is strongly encouraged. Any community that wishes to adopt and enforce a building code is required to use the State Building Code.

State regulations that affect the ability of buildings to withstand hazard events are included in the codes summarized in the table below.

Table 6-2. State Building Regulations

Code	Code Description
West Virginia Building Code	The West Virginia Building Code establishes the regulations applied to building and construction within the State
West Virginia Water Laws	Establishes regulations applied to water resources and water service providers within the State
West Virginia Public Health and Safety Code	Establishes regulations applied to public health and safety resources and services within the State

The Building Code Effectiveness Grading Schedule (BCEGS), administered by the Insurance Services Office (ISO), assesses community building codes and their enforcement with a focus on mitigating losses from hazards (Verisk Analytics 2023). It is graded on a scale of 1–10. Municipalities with effective and well-enforced codes should have less loss experience by continuing to lessen their hazard-related damage, which lowers their insurance costs and incentivizes states and communities to enforce their building codes. BCEGS helps communities (Verisk 2023) by:

- Improving building codes (by encouraging the adoption of the most current regulations), building departments, and code enforcement
- Promoting the construction of better, more catastrophe-resistant buildings
- Reducing property losses from catastrophes
- Reducing the economic and social disruption that results from catastrophes’ severe and widespread destruction

State Fire Code

The West Virginia State Fire Code is established and gives authority to any fire department recognized by West Virginia for the safeguarding of life and property from fire and explosive hazards through West Virginia Code of State Rules, Title 87, and WV Code Chapter 15A, Article 11, Section 3 which was adopted July 1, 2010. The State



Fire Code requires fire extinguisher systems, fire alarm systems, emergency power, smoke management, and sprinkler protection systems for buildings of various building types as a form of fire protection and mitigation. Adoption and enforcement of the State Fire Code is mandatory across the state, but it excludes one- and two-family residential structures. Wildfires are an area of focus of mitigation efforts through support of wildfire preparedness and prevention, response, suppression, coordination, and management. The Office of the State Fire Marshal supports mitigation efforts through training, fire safety inspections, wildfire response, and providing firefighting resources.

National Flood Insurance Program and Community Rating System

The National Flood Insurance Program (NFIP), established in 1968 by the National Flood Insurance Act, is a voluntary program intended to provide affordable flood insurance to residents and encourage floodplain management. Communities participating in the NFIP, and their residents and businesses, are eligible for federally backed flood insurance coverage, specific federal grants and loans, and disaster assistance. The goals of the NFIP include (Wetmore, et al. 2006):

- Decreasing the risk of flood losses
- Reducing the costs and consequences of flooding
- Reducing the demand for Federal assistance
- Preserving and restoring the natural beneficial floodplain functions

To receive these benefits, communities must adopt and enforce floodplain management regulations. Within the State, there is a 98% participation rate among communities, with only 5 communities out of 283 not currently participating in the NFIP as of May 31, 2023 (FEMA 2023). The following non-participating communities have identified special flood hazard areas, but do not have NFIP benefits available:

- Town of Brandonville
- Town of Carpendale
- Town of North Hills
- Town of Thurmond
- Town of White Hall

WVEMD is responsible for statewide flood forecasting, flood operations, and other essential flood emergency response and management activities. The State’s NFIP coordination element is also housed within WVEMD. The Floodplain Management Section is composed of a State NFIP Coordinator, who manages the Community Assistance Program – State Support Services Element (CAP-SSSE) Grant and Cooperating Technical Partners (CTP) program, and two support positions.

A summary description of how state agencies work together to administer the NFIP pre- and post-disaster, including:

- Changes in participation, insurance coverage and trends
- Substantial damage administration
- Support for communities participating in or interested in the Community Rating System (CRS)
- A summary of structures at high risk of flooding, including repetitive and severe repetitive loss structures and any action taken to reduce the number of these structures
- Any other NFIP challenges that may be identified during regular coordination between the State and FEMA



The WVEMD Floodplain Management Section, on behalf of FEMA, conducts Community Assistance Visits (CAVs) and Community Assistance Contacts (CACs) to NFIP communities to provide individual technical assistance. WVEMD provides statewide NFIP workshops designed to interpret and explain the NFIP regulations and give an overview of the need for community-based floodplain management.

WVEMD and FEMA conduct workshops for floodplain management agencies, including State and local officials. The workshops allow floodplain management officials to better understand FEMA’s minimum regulatory requirements and how to meet them. The workshops also provide opportunities to fulfill the requirement set forth through the 2012 Congressional 1st Special Session’s update to § 15-5-20a of the WV Code to include Floodplain Manager Training. The update to this section requires local floodplain managers within the state to complete six hours of training in floodplain management annually to maintain good standing with WVEMD. Failure to meet this requirement results in suspending the floodplain manager from their responsibilities until the training requirement has been fulfilled. Communities with floodplain managers who are suspended of their duties are then required to transfer floodplain management responsibilities and fees to another jurisdiction with a floodplain manager in good standing. This requirement became effective July 1, 2012.

To assist communities in meeting this training requirement and help local floodplain managers further augment their skill sets, WVEMD’s Floodplain Management Section annually offers many training topics. WVEMD regularly schedules workshops and provides on-demand as an addition to the existing schedule. Workshop topics include:

- FEMA’s Elevation Certificate
- Floodplain Management and Duties of the Local Administrator
- Floodplain Management Review Course
- Substantial Damage/Substantial Improvement
- Ordinance Administration

In addition to these in-person visits and training, the Floodplain Management Section, in coordination with West Virginia University, provides support through the West Virginia Flood Tool (WVU 2015), which offers GIS-based maps and data to all communities to be utilized in the day-to-day floodplain management operations.

The State’s floodplain management law (West Virginia Legislature's Office of Reference & Information n.d.) allows local governments to adopt and exceed floodplain management regulations outlined in Title 44 of the Code of Federal Regulations (44 C.F.R.) to reduce risk and seek premium discounts. By permitting the enforcement of higher regulatory standards, communities in the state are provided the opportunity to participate in the FEMA’s CRS program, which offers insurance premium discounts of up to 45% based on the community’s enforcement of higher regulatory standards.

The Model Ordinance implemented by the State is inclusive of many higher regulatory standards which provide both opportunity for resilience in practice and opportunity for credit in the CRS program, as described in Table 6-3.



Table 6-3. West Virginia Model Ordinance Provisions Creditable in the CRS Program

Topic Area	NFIP Minimum	WV Model
Elevation	44 C.F.R. §60.3I: At or above BFE	Section 5.6: BFE + 2ft
Floodplain Administrator Requirements	None	Article II, Section 2.1: Completion of NFIP Course 273 within one year of the position being secured and complete 6 hours of continuing education per year as required by WV State Code §15-5-20(a)
Finished Construction Elevation Certificate Requirement	None	Article V, Section 5.3A(f): A finished construction elevation certificate must be prepared by licensed professional surveyor...must confirm the structure in question together with attendant utilities are elevated in compliance with permit conditions
Non-Conversion Agreement	None	Article V, Section 5.3A(g): A non-conversion agreement shall be signed by the applicant whenever the Floodplain Administrator determines that the area below the first floor could be converted to a non-conforming use
Subdivisions	44 C.F.R. §60.3(a)(4): Must minimize flood damage through clustering and adequate drainage	Article 5.5: All lots shall have a buildable area outside the special flood hazard area (SFHA)
Manufactured Homes	44 C.F.R. §60.3(c)(6): Manufactured homes built in the floodplain must be anchored and built to BFE	Article 6.1B: Manufactured homes shall not be sited within the SFHA
Manufactured Homes	44 C.F.R. §60.3(c)(12): Excludes existing manufactured home parks from requiring new manufactured homes from elevating to BFE	Article 6.1B: Removes 44 C.F.R. §60.3(c)(12) exclusion of existing manufactured home parks from meeting minimum BFE
Foundation Protection	None	Article 6.1E: Requires for buildings on compacted fill protection from erosion and scour

The CRS is a voluntary incentive program implemented in 1990 that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced risk. For participation in the program communities must apply, annually recertify after entry is granted and participate in full verification assessment every 3 or 5 years.

The CRS is an extension of the NFIP, and as a result, the goals of the CRS support those of the NFIP and the advancement of community resilience:

- Reduce flood damage to insurable property.
- Strengthen and support the insurance aspects of the NFIP.
- Encourage a comprehensive approach to floodplain management.

WVEMD’s Floodplain Management Section’s CRS strategy has two main goals:

- Enroll more communities in the CRS program.
- For participating communities, improve their CRS classification.



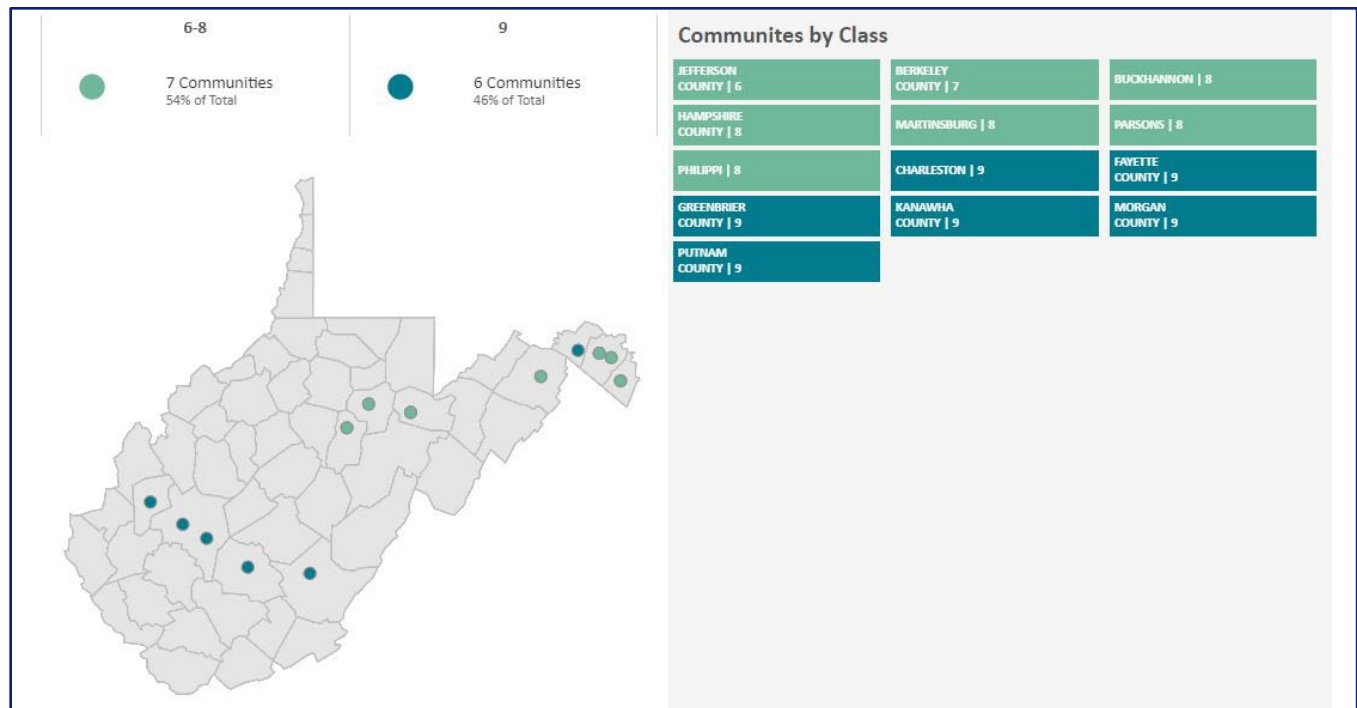
The strategy has four main elements and a series of projects associated with them:

- **Encourage Participation:** State staff promote the CRS and help communities join the program. WVEMD explains the benefits of the CRS to elected officials and other local decision-makers so they will encourage their staff to devote the resources needed to join the CRS or improve their classification.
- **Facilitate Credits:** WVEMD and other state agencies help communities receive credit for state programs.
- **Improve Local Programs:** Training, templates, models, and examples help communities improve their floodplain management activities and receive CRS credit for them.
- **Track Progress:** WVEMD can see where improvements are made, make adjustments, and measure the worth of its efforts.

The CRS program uses a Class rating system to determine flood insurance premium reductions for policyholders. Participating communities are rated from 9 to 1. Each class achieves an additional 5% discount to applicable NFIP policies in the community (minus rated, severe repetitive loss, and/or structures with violations may not receive the discount). A Class 9 community receives a 5% discount. A Class 1 community receives a 45% discount.

As of April 2023, there are 1,504 communities nationwide participating in the CRS, including 13 in West Virginia. Most participating West Virginia communities are where the highest concentrations of NFIP policies in force can be found. The area’s concentration of coverage is likely due to the concerns of riverine flooding, which can be widespread. The 13 participating communities in West Virginia allow for discounted premiums for 2,377 policies, translating to \$190,180 saved on the total premiums of \$2,608,346 annually by state residents (Verisk Analytics, Inc. 2023). Figure 6-1 below summarizes the distribution of communities by CRS class rating.

Figure 6-1. West Virginia CRS Communities



Source: Verisk Analytics, Inc. 2023



CRS participation and interest in West Virginia is also supported by the West Virginia Floodplain Management Association. This group is formed to represent municipal, county, regional, and state networks that collaborate to meet local flood mitigation goals and support one another overall floodplain management, mitigation, and the CRS. While this group does not earn credit in the CRS program itself, it does provide a platform for learning and an opportunity to discuss changes, obstacles, and successes.

Risk Mapping, Assessment and Planning Program (Risk MAP)

Risk MAP provides high-quality flood maps and information, tools to assess better the risk from flooding, and planning and outreach support to communities to help them take action to reduce (or mitigate) flood risk. Each Risk MAP flood risk project is tailored to the needs of each community and may involve different products and services. FEMA coordinates and works directly with county floodplain managers during the Risk MAP project process.

The State's participation in and capabilities related to FEMA's flood hazard mapping program (i.e., Risk MAP), including how the State shares flood risk data for use in mitigation and community planning and mitigation action development, identifies areas that need to be studied or restudied, and builds partnerships.

Geographic Information System (GIS) funding from FEMA led to a comprehensive map modernization program that continued through 2018. The program then transitioned into Risk MAP. The WV Floodplain Management program partnered with WVU to develop a system to enable easier access to current flood maps online. The project worked to overcome the limited number of West Virginia flood studies by implementing the State's Map Modernization Business Plan. This tool incorporates data such as Hazus risk assessment outputs, NFIP FIRMs, locations of mitigated structures, and other available data which required digitization of revised FIRMs. In July 2011, this online tool launched. It is currently maintained by the WVU GIS Technical Center (WVU GISTC), housed in the Department of Geology and Geography at WVU.

FEMA Region 3 has a separate section called Mit Maps which encompasses all the Region's Mitigation Mapping and Data. This data includes FIRMs, flood hazard data, Risk Rating 2.0 information, changes in the SFHA since the last FIRM, climate mapping, the National Risk Index (NRI), WV Flood Tool, building code adoption, economically disadvantaged communities, dam inventory, National Levee Database information, and elevation and topography information (FEMA 2022).

The West Virginia Floodplain Management program continues to work with partners to improve the West Virginia Flood Tool, including developing LiDAR data, bridge and culvert data, and information that will enhance the analysis of approximate Zone A flood elevations.

WV State Resiliency Office (SRO)

West Virginia Code §29-31-2 establishes the WVSRO organized within the Office of the Governor to serve as the recipient of disaster recovery and resiliency funds, excluding federal Stafford Act funds, and to serve as the coordinating agency of recovery and resiliency efforts. This includes matching funds for the other disaster recovery programs. The WVSRO's mission is to minimize the loss of life and property, maintain economic stability, and improve recovery time by coordinating with stakeholders to implement disaster-resilient strategies. The WVSRO coordinates government agencies, first responders and stakeholders for emergency, disaster, response, recovery, and resiliency planning by coordinating mitigation actions. The WVSRO works closely with other groups such as



the West Virginia Silver Jackets, FEMA, U.S. Department of Housing and Urban Development (HUD), debris management staff, the Hazard Mitigation State Planning Team (SPT), and the State Flood Protection Plan Update group to ensure necessary mitigation actions are being carried out. The WVSRO hosts the West Virginia Flood Symposium that is designed to analyze the root causes of flooding within the state and come up with potential solutions of its impacts. The WVSRO website provides lifeline contact information in the event of an emergency as well as resources that could be needed and used in the event of a flood (WV State Resiliency Office 2023).

West Virginia University

WVU assists the State in hazard mitigation development by educating students using tools and information created by staff and students. Students have contributed data to the National Environmental Services Center, composed of four national programs, which assists small and rural communities with their utility management needs and offers solutions to any problems they may have regarding environmental issues (WVU 2023).

West Virginia GIS Technical Center

West Virginia University created a technical center designed to educate students and provide technical support services to enhance the continuous development and operation of GIS in West Virginia. Many datasets and analyses include locations in West Virginia prone to various hazard events. Some of the technical center's objectives include (WVU GISTC 2022):

- Reduce the duplication of data development efforts across multiple organizations
- Catalog and distribute accurate GIS spatial data and information free of charge through the Internet
- Coordinate acquisition of new data additions to the West Virginia Spatial Data Infrastructure
- Assist with strategic planning, development, and implementation of statewide mapping guidelines
- Provide advisory services and training programs in the field of geographic information science
- Conduct research and provide education toward improvement of geographic information technologies

EMERGENCY MANAGEMENT

State Emergency Operations Plan

WVEMD has the legal authority to implement emergency management plans to deal with disasters and emergencies relating to the State and entities that are a part of it. West Virginia Code Chapter 15, Article 5 (West Virginia Legislature n.d.) requires that West Virginia entities develop and maintain an updated emergency operations plan so that the State and local jurisdictions are prepared for natural and human-caused hazard events. The most recent West Virginia Emergency Operations Plan is dated January 2016. The plan also bestows the responsibility for preserving life and property upon the governor of West Virginia. It analyzes existing resources to obtain relief and recovery assistance promptly in the event of an emergency or hazard. The governor further bestows emergency functions/management responsibilities to the appropriate state agencies and entities.

The plan is prepared in three main parts: the Emergency Support Function Annexes, the Support Annexes, and the Incident-Specific Annexes. There are 14 Emergency Support Function Annexes that identify the structure for State-coordinated emergency operations and identify primary and supporting agencies. Seven Support Annexes analyze State agency coordination and execution and ensure efficient incident management. Six Incident-Specific Annexes



address specialized response and recovery procedures that can be contingent on the specific hazard impacting the state (WVEMD 2016).

Integrated Flood Observation and Warning System (IFLOWS)

In West Virginia, the National Weather Service (NWS) issues flood warnings and watches from information collected by installed rain and stream gauges scattered throughout the state. Rain gauges cover 47 counties throughout the state, and the WVEMD conducts monitoring. The information collected is also documented in a database to review rain patterns and amounts. The goal of IFLOWS is to protect life and property from flash floods, as well as to serve as a precipitation database. The database can provide precipitation data that can calculate the increase in river/stream level rise, which can further predict flooding based on the flow and topography of areas that may be of concern (WVCA n.d.).

State Flood Protection Plan

The State Code establishes the State Conservation Committee and Conservation District, and is responsible for conserving natural resources and protecting wildlife. This committee prepared a West Virginia Flood Protection Plan to address numerous goals, including reducing loss of life due to flooding; reducing property damages; developing programs and tools that will assist in implementing a sound program of flood damage reduction and floodplain management; reducing economic losses while supporting a viable economy; and protecting the floodplain environment. In conjunction with IFLOWS, the State Flood Protection Plan is geared toward discovering potential problem areas and mitigating that risk before they become a problem. The plan is divided into six sections: Introduction, Issues Identification and Assessment, Identification of Existing Roles, Present Activities and Roles, and Proposed Projects and Needs and Recommendations (WVCA n.d.).

ECONOMIC DEVELOPMENT

WV Department of Economic Development

The West Virginia Department of Economic Development provides information on available sites and buildings, incentives, and other programs. The department's website offers interactive mapping tools so that people can evaluate companies and demographics in West Virginia. The State makes a significant amount of money on tourism and usage of the natural environment (e.g., camping) of West Virginia; therefore, ensuring proper mitigation for hazards to prevent loss of money flow is crucial to ensure the stability and continuation of this economic sector. The Department of Economic Development contains six divisions supporting West Virginia's businesses and economy: the Small Business Development Center, Community Advancement and Development, Office of Energy, International Development, Business and Industrial Development, and the Broadband Enhancement Council. Six regional economic development offices work with the State to ensure the entire state is being fully served (WV Economic Development n.d.).

West Virginia Department of Economic Development received an allocation of \$106,494,000 for resiliency measures to decrease the impact of natural hazard events and promote the protection of life and property. A grant requirement is that half of the money earmarked be spent in Kanawha, Greenbrier, Nicholas, and Clay Counties, the most impacted and distressed counties in West Virginia (WVCAD n.d.).



WV Department of Commerce

The West Virginia Department of Commerce’s mission is to promote and preserve the well-being of the citizens of West Virginia by providing a cooperative, interagency system that stimulates diverse economic growth, encourages the appropriate use of the state’s abundant natural resources, improves the safety and productivity of the workforce, and promotes the beauty and desirability of the State as a world-class tourism destination. The Department of Commerce includes the West Virginia Division of Forestry (WVDFOF), Division of Labor, Division of Natural Resources, Geological and Economic Survey, Office of Miners’ Health, Safety and Training, Workforce WV, and the Division of Rehabilitation Services. The Department of Commerce administers some conservation funds to prioritize the natural environment and focuses on ensuring people’s and property’s health and safety, including hazard mitigation. This includes proper training for miners, limiting flooding and fires in naturally prone areas, and ensuring that residents of West Virginia have clean air and water in their communities (WV Department of Commerce 2023).

WV Economic Development Authority

The West Virginia Economic Development Authority (WVEDA) was formed in 1962 under Chapter 31, Article 15 of the West Virginia Code (West Virginia Legislature n.d.). WVEDA oversees developing and advancing business prosperity and economic welfare in West Virginia by providing loans, financing, and leasing opportunities to promote the retention and creation of new and old commercial and industrial development. WVEDA offers loans and bonds to promote economic growth and development. These bonds and loans can also be used to hazard-proof a commercial or industrial building to limit the effects of hazards on these buildings, which may lead to a continuity of operations in the event of a potentially damaging risk (WVEDA 2023).

HOUSING

CDBG-MIT

U.S. HUD initiated the Community Development Block Grant Mitigation (CDBG-MIT) program on August 30, 2019. The program allows eligible applicants to use this assistance in areas impacted by recent disasters to mitigate disaster risks and reduce future losses. CDBG-MIT defines mitigation as projects and activities that increase resilience to disasters and emergencies and reduce/eliminate the long-term risk of loss of life and properties, injuries, damages to properties, and suffering and hardship by lessening the impact of future disasters. The goals of CDBG-MIT funds include (U.S. HUD 2021):

- Support data-informed investments, focusing on the repetitive loss of property and critical infrastructure.
- Build capacity to analyze disaster risks and update hazard mitigation plans comprehensively.
- Support the adoption of policies that reflect local and regional priorities that will have long-lasting effects on community risk reduction, including risk reduction to community lifelines and decreasing future disaster costs.
- Maximize the impact of funds by encouraging leverage, private/public partnerships, and coordination with other federal dollars.



CDBG-DR

The Community Development Block Grant Disaster Recovery (CDBG-DR) grant helps states, specifically in low-income areas, to recover from presidentially declared disasters. CDBG-DR funds are for disaster relief, long-term recovery, restoration of infrastructure, housing, and economic revitalization. These grants help to rebuild affected areas, with most of the funding going to HUD-determined most impacted and distressed counties, including Clay, Greenbrier, Kanawha, and Nicholas Counties. Grant requirements for West Virginia emphasize that 80 percent of funds must benefit low- and moderate-income persons (WVCAD n.d.).

CDBG-RISE

The RISE program is partnered with WV Housing Development Fund. Created on February 12, 2018, in response to a flood in June of 2016, to help communities rebuild above pre-flood levels. The program removes structures beyond repair and allows developers to build multifamily structures in the most impacted and distressed counties in West Virginia. All funds in the RISE program must be expended by September of 2023 (RISE WV n.d.).

HEALTH AND SOCIAL SERVICES

WV Department of Health & Human Resources (DHHR)

The WVDHHR provides a wide range of life-saving resources to the residents of West Virginia, including socially vulnerable populations. The department encompasses the Bureau for Behavioral Health; Bureau for Child Support Enforcement; Bureau for Family Assistance; Bureau for Medical Services; Bureau for Public Health; Bureau for Social Services; Office of Inspector General; and West Virginia Children’s Health Insurance Program (WVCHIP). The department also contains boards and commissions that advocate for vulnerable populations, such as a Women’s Commission, Commission for the Deaf and Hard-of-Hearing, Developmental Disabilities Council, Human Rights Commission, and Commission to Study Residential Placement of Children. The DHHR also offers many programs and services such as AIDS/STD Program, Children and Adult Services, Electronic Benefits Transfer (EBT), Family Planning Services, Infectious Disease Epidemiology, Tobacco Prevention, and Breast and Cervical Screening Program. They also offer online services allowing Child Abuse reports, Welfare Fraud reports, and Healthcare Crime to be reported. WVDHHR is also concerned with threat preparedness for hazards and has a Center for Threat Preparedness that provides information relating to alerts and advisories to keep residents safe. This Center also provides public health training and how to prepare for various hazards such as earthquakes, hurricanes, wildfires, and winter weather (WV Department of Health & Human Resources 2023).

The WVDHHR provides a COVID-19 dashboard that displays the updated total number of cases, deaths, active cases, and vaccine administration. A daily COVID-19 update is posted which documents the number of deaths, how old the people were who passed, and the current number of active cases per county. This department also provides information on quarantining and isolation tactics.

WV Office of Miners’ Health, Safety & Training

The West Virginia Office of Miners’ Health, Safety & Training has existed since 1883. It is responsible for enforcing the State’s mining laws, rules, and regulations, and its prime focus is on the health and safety of miners employed in West Virginia. The office inspects, enforces, and investigated all mining activity and conducts continuous training on the mining industry. There are four regional offices and a headquarters office with inspectors and



administrative support in each office responsible for inspecting over 616 mines/quarries and ensuring that all independent contracting companies are supporting safety instructions. This office is also concerned with monitoring mining-related hazards, such as landslides and subsidence for the public's safety. The agency issues permits and approvals, and maintains statistics, while publishing training materials for businesses and employees (WV Office of Miners Health Safety & Training n.d.).

INFRASTRUCTURE

U.S. Department of Agriculture (USDA) Rural Development

The U.S. Department of Agriculture (USDA) Rural Development in West Virginia supports rural prosperity by emphasizing the implementation of modern infrastructure, including high-speed internet and water and waste treatment systems. USDA Rural Development also promotes affordable housing and community infrastructure by funding technical assistance. Businesses and manufacturers are encouraged to improve and expand with business plans and promote relevant goods and services. USDA Rural Development also supports renewable systems for the agricultural industry.

USDA Rural Development contains many vital programs and grants supporting rural development in West Virginia. The Single-Family Housing Direct Home Loans assist low-income applicants to obtain housing in eligible rural areas by providing payment assistance. The Single-Family Housing Repair Loans and Grants provide loans to low-income homeowners so that they may repair and improve their homes to ensure safety. The Rural Energy for American Program Energy Audit and Renewable Energy Development Assistance Grant assist small rural businesses and agricultural businesses by promoting energy audits and providing renewable energy development assistance. The Water and Waste Disposal Loan and Grant Program includes funding for reliable and clean water systems, sewage disposal, solid waste disposal, and stormwater drainage for businesses and homes in eligible rural locations. The Community Facilities Direct Loan and Grant Program provides affordable funding to continue to develop essential community facilities in rural areas. The Business and Industry Loan Guarantees offer loan guarantees to lenders to provide loans to rural businesses (USDA n.d.).

DOT Statewide Transportation Improvement Plan

Transportation is an essential aspect of hazard mitigation because the size and location of the roads determine the efficiency of evacuation in the event of a hazard. The Statewide Transportation Improvement Plan is a federally required document that provides the Federal Highway Administration and the Federal Transit Administration a master list of all projects that are candidates for federal aid, including regionally-significant projects. The plan addresses transportation improvements over the next six years and is updated every three years. The current plan encompasses 2020-2025, and the 2023-2028 plan is underway (WVDOT n.d.).

Dam Safety Program

The West Virginia Department of Environmental Protection (WVDEP) is responsible for protecting lives and property from the risk of a dam failure (dams and the risk from dam failures are described in Section 5.1: Dam Failure). WVDEP's Dam Safety Section within the Division of Water and Waste Management oversees dams that are not related to the coal industry ("non-coal dams"), while the Division of Mining and Reclamation (DMR) oversees and regulates dams related to the coal industry ("coal dams") in conjunction with the Mine Safety and



Health Administration. Of the dams in the State, the WV Conservation Agency is responsible for 170 high hazard potential dams. The agency works closely with the Dam Safety Section.

The Dam Safety Section (WVDEP 2023) has jurisdiction over non-coal dams that are also not federally owned and are not used to generate hydroelectric power. Those are the jurisdiction of the U.S. Army Corps of Engineers (USACE) and the Federal Energy Regulatory Commission, respectively. Dam Safety maintains an inventory of dams in its jurisdiction, conducts inspections, issues certificates of approval, responds to emergency calls, and reviews and approves monitoring and emergency action plans (MEAP) required for high hazard and some significant hazard potential dams. Maintenance inspections are required once every one to two years. If the Dam Safety Section identifies any problems with a dam, the section requires a Plan of Corrective Action from the dam owner to address the problems.

MEAPs are required to be updated on a regular basis. During the MEAP development and update processes, the dam owner typically works with the county's emergency manager. The county emergency manager reviews and signs off on the MEAP. MEAPs include maps delineating the expected inundation area resulting from a dam failure and evacuation routes. MEAPs are also distributed to any organization that has a response role identified in the plan. The Dam Safety Section receives a copy of the maps (typically in pdf format) but not the underlying GIS data. The Dam Safety Section is developing an online application for dam safety for the emergency management community; it is expected to be released in 2024.

While the Dam Safety Section and the WV Conservation Agency work closely together, the coal dam program operates separately due to having unique regulatory requirements as opposed to the non-coal program. The State does not have an overall strategic plan for dam safety as a whole. State officials identified the 2004 Flood Protection Plan (WVCA n.d.) as the closest thing to a strategic plan, as it also addresses high hazard potential dams within the state.

The State faces a funding challenge in its dam safety program. There are many non-compliant dams in the state, and owners do not have the money to conduct the regular inspections let alone the rehabilitation work. Officials reported that, after federal agencies construct dams, the State is required to maintain it, and it can be a struggle to fund that maintenance. The WV Conservation Agency reported that it spends over \$1 million each year just to mow the grass at agency dams.

For coal dams, the dams are maintained by a private entity. If they cannot afford to maintain the dams, they may find another company to take over the site. The coal dam program is currently working on digitizing dam locations.

NATURAL AND CULTURAL RESOURCES

WV Division of Natural Resources (DNR)

Broken into six districts, West Virginia DNR is responsible for administering a comprehensive program for the conservation, exploration, protection, and use of natural resources within the state. The DNR releases annual reports that cover programs, budgets and funding, licenses distributed, training programs, and updated project statuses. The DNR's Wildlife Resources Section conserves, manages, and protects fish and wildlife resources in the State. The West Virginia State Parks Section focuses on preserving natural areas that have scenic, scientific, or historical significance. The Law Enforcement Section protects the state's natural resources through enforcement,



education, and ensuring that all state laws are complied with. The Office of Land and Streams monitors the management and acquisition of recreational property owned or leased by the State. The program also manages rivers and streams the DNR owns. West Virginia Mineral Development administers and manages land and mineral resources in the state. The sections of the DNR actively engage in developing, enforcing, and applying for grants related to hazard mitigation projects/plans (WVDNR 2023).

WV Department of Environmental Protection (DEP)

The West Virginia DEP enforces state and federal environmental laws to protect land, water, and air to promote a healthy environment. The DEP was established in 1991 and elevated to a state-level agency in 2001. This agency is significant in implementing and enforcing hazard mitigation practices and plans because of its involvement in the natural environment. The DEP contains the Division of Air Quality, whose primary goal is to protect and improve air quality to preserve it for future generations; the Division of Land Restoration, whose goal is to remediate contaminated land for reuse to safeguard the health and safety of the public; the Division of Mining and Reclamation, whose goal is to ensure compliance with the Surface Mining and Reclamation Act; the Division of Water and Waste Management, whose focus is to protect the state's watersheds by controlling waste management; and the Office of Oil and Gas, which is responsible for regulating production and storage of oil and natural gas. The DEP also contains a GIS unit that creates additional data and maps for the divisions and the public (WVDEP 2023).

6.2.3 Participation in National Mitigation-Related Programs

U.S. ARMY CORPS OF ENGINEERS (USACE)

The USACE uses environmental sustainability as a guiding principle in strengthening the nation's security by maintaining the nation's infrastructure and technology. The USACE devises hurricane and storm damage reduction infrastructure and reduces risks from other disasters, such as cleaning contaminated sites to sustain the environment. They also work with other federal and state agencies to construct sustainable facilities, regulate waterways, and manage natural resources to address sustainability, changing future conditions, endangered species, environmental cleanup, and ecosystem restoration.

U.S. FISH AND WILDLIFE SERVICES

The West Virginia sector of the U.S. Fish and Wildlife Services is located in the Northeastern region, and the office headquarters is located in Massachusetts. However, there are seven Fish and Wildlife facilities throughout West Virginia. The goal of the offices is to recover endangered species as well as to work to conserve and protect fish, wildlife, and their habitats. The Northeast region's goal is to avoid, minimize and mitigate threats to the natural resources in the Northeast area.



6.2.4 State Pre- and Post-Disaster Funding Capabilities

44 C.F.R. §201.4(c)(3)(iv): [The State Plan must include an] ...Identification of current and potential sources of Federal, State, local, or private funding to implement mitigation activities.

This section discusses and evaluates the State’s funding capabilities, including a summary of funding resources that the State has access to or is eligible to use, a description of how the State has used its funding for hazard mitigation, and the use of FEMA funds.

USE OF STATE FUNDING FOR MITIGATION ACTIVITIES

The State uses its funding for a variety of mitigation activities. This use of funds includes earmarking resources for mitigation projects, providing grant monies to the counties and non-governmental organizations, supporting ongoing programs that further mitigation goals, and using state or in-kind contributions as matching funds for federal grants. Table 6-4 below describes a selection of the grants and programs administered by West Virginia agencies.

Table 6-4. Funding Streams Administered by the State

Funding Program	Description	Eligible Applicants
Land and Water Conservation Fund	This program provides supplemental funding for acquiring and developing public outdoor recreational areas throughout West Virginia. This grant is a 50/50 reimbursable matching grant. Proposed projects must be consistent with the Statewide Comprehensive Outdoor Recreation Plan.	Funds are provided to local government units, park boards, commissions, and district and state governments.
Abandoned Mine Lands Economic Revitalization (AMLER) Program	The WVDEP Office of Abandoned Mine Lands and Reclamation administers funding for economic development projects on abandoned mine lands through the AMLER program.	Funds are provided to projects on or adjacent to mine sites that ceased operations. Projects must receive approval from the U.S. Department of Interior’s Office of Surface Mining, Reclamation, and Enforcement.
Watershed Project Grants	The Non-point Source (NPS) Program emphasizes management strategies and programs to address nonpoint pollution problems. WV’s NPS administers the §319 grants. Before project grants can be approved, a watershed-based plan (WBP) must be developed through local stakeholder involvement. Projects within a watershed must be designed to implement the plan.	Eligible applicants are state agencies, cities, counties, and local governments and must support the NPS Program in accomplishing its goals and objectives as stated in the Management Plan.
Rehabilitation Environmental Action Plan (REAP) Grants	REAP focuses on cleanup efforts from both program staff and volunteers statewide. In a unique partnership, the program empowers citizens to take ownership of their communities by providing technical, financial, and resource assistance in cleanup efforts. REAP contains various grant opportunities.	Various eligible applicants are available depending on the grant.



Funding Program	Description	Eligible Applicants
	<ul style="list-style-type: none"> • Recycling Assistance Grant Program: the funds are available to any county, municipality, public or private entity in West Virginia interested in planning and implementing recycling programs, related public educational programs, or need assistance in recycling market efforts. • Litter Control Grant Program: The Litter Control Grant is a matching fund that assists municipalities and county government agencies with community cleanup and litter enforcement projects. • Covered Electronic Devices Grant Program: Expenditures from the fund shall be for grants for recycling or other programs that divert hidden electronic devices from the waste stream. • E-Cycling Contractors: Grantees should confirm that the contractors providing recycling services are making a good faith attempt to adhere to one of the two accredited certification standards for electronic recyclers - Responsible Recycling (R2) or Standard for Responsible Recycling and Reuse of Electronic Equipment (e-Stewards). 	
<p>Transportation Alternatives Program</p>	<p>Congress initiated several reimbursable grant programs, including TAP, designed to enhance America's "Livable Communities" through the Intermodal Surface Transportation Efficiency Act (ISTEA) and continued by the Transportation Equity Act for the 21st Century To be eligible, a project must: (1) have a relationship to surface transportation; and (2) must be one of the qualifying activities set by law.</p>	<p>Eligible applicants are local Governments, Regional transportation authorities, education agencies, and transit agencies.</p>
<p>Recreational Trails Fund Program (RTP)</p>	<p>Congress initiated several reimbursable grant programs, including the RTP, designed to enhance America's "Livable Communities" through the ISTEA. West Virginia Transportation Alternatives and Recreational Trails Program (TARTP) grants help towns and cities build and improve sidewalks, lighting, trails, and more. The West Virginia Department of Transportation administers the program and is funded by the Federal Highway Administration.</p>	<p>Nonprofits, local/regional governments, transit agencies, public land agencies, and school districts may be eligible applicants.</p>
<p>Community Participation Grant Program</p>	<p>The Governor's Community Partnership program provides state grant funds for community and economic development projects throughout West Virginia. The program enables communities to expand, build, and improve various public facilities and services in true community partnerships.</p>	<p>Eligible applicants include any public infrastructure improvement in West Virginia.</p>
<p>Rural Health Infrastructure Loan Program</p>	<p>The Center for Rural Health Development, Inc. (Center), a West Virginia not-for-profit corporation, operates the West Virginia Rural Health Infrastructure Loan Fund (Loan Fund) to make affordable and flexible loans available to West Virginia's health care providers. Its objective is to strengthen West Virginia's rural health infrastructure.</p>	<p>Eligible applicants include health institutions that are licensed health care providers operating in West Virginia.</p>



Funding Program	Description	Eligible Applicants
In Lieu Fee (ILF) Program	West Virginia's ILF Program aims to achieve no net loss of existing stream and wetland acreage and functions in West Virginia through effective restoration, enhancement, replacement, and preservation of aquatic resources. The program utilizes watershed and landscape-based planning to identify and assess potential mitigation opportunities that maximize the ecological benefits of marine resources within the same geographic service areas as the impacts.	Eligible applicants include any for-profit, nonprofit and government agency.
Appalachian Regional Commission (ARC) Federal Grant Program	Applicants must meet the federal financial management requirements outlined in 2 C.F.R. §200. Construction projects must comply with federal regulations for environmental review and Davis-Bacon labor standards. ARC funds can match any other funding source, including federal, state, and local. The highest priority for the West Virginia ARC program is infrastructure projects (water, sewer, broadband), particularly projects in ARC-designated distressed counties.	Eligible applicants include local governments, state governments, and nonprofit organizations.
Weatherization Assistance Program	Weatherization has operated for over 40 years and is the nation's most extensive single "whole-house" energy efficiency program. The program's primary purpose, established by law, is "...to increase the energy efficiency of dwellings owned or occupied by low-income persons, reduce their total residential energy expenditures, and improve their health and safety, particularly vulnerable and predominantly low-income persons, such as the elderly, the disabled, and children. The West Virginia Department of Economic Development (WVDED) administers this program.	Eligible applicants include community action agencies.
Land and Water Conservation Fund	LWCF provides matching grants to assist in the planning, acquiring, and developing of state and local parks and is administered by WVCAD.	Eligible applicants include property acquisition and development of outdoor recreation facilities to state agencies, local governments, and park boards.
Chesapeake Bay Implementation Grant and Chesapeake Bay Regulatory/Accountability	Project funds are available to implement projects that reduce the area's nitrogen, phosphorous, and sediment pollution.	Eligible applicants include state governments in the Chesapeake Bay watershed.
Clean Water State Revolving Fund Assistance	The Clean Water State Revolving Fund program is a funding program to address water quality problems through wastewater facility construction, upgrades, or expansions. When a community has been recommended by the West Virginia Infrastructure and Jobs Development Council to seek the Clean Water State Revolving Fund program for financial assistance, that community will be contacted by one of the financial managers.	Eligible applicants include local governments and public service districts.



USE OF FEDERAL FUNDING FOR MITIGATION ACTIVITIES

Four main FEMA grant funding opportunities support the State’s mitigation activities. Two of these are available pre-disaster (Building Resilient Infrastructure and Communities [BRIC] and Flood Mitigation Assistance [FMA]), and two are available post-disaster (Hazard Mitigation Grant Program [HMGP] and Section 406 funds). The State has historically utilized HMGP and the former Pre-Disaster Mitigation (PDM) grant to the most significant degree of FEMA’s mitigation programs. HMGP funds are typically used for project implementation, while BRIC is and PDM was typically used to support mitigation planning activities at the state and county level.

It is important to note that HMGP funding is determined as a percentage of the funds spent on public and individual assistance for a presidentially declared disaster.

Table 6-5. Evaluation of Funding Resources for Mitigation Efforts

Funding Program	Funding Agency	Pre-Disaster	Post-Disaster
Building Resilient Infrastructure and Communities	FEMA	◆	
	<p><i>Description: BRIC was developed by FEMA after the Disaster Recovery Reform Act of 2018 was signed into law to address public infrastructure in relation to pre-disaster hazard mitigation and was designed to initially replace FEMA’s Pre-Disaster Mitigation Grant Program.</i></p> <p><i>Funding is aimed towards capability and capacity building, encouraging innovation, promoting partnership, enabling larger projects, maintain flexibility and providing consistency. The goal of the grant is to reduce overall risk from upcoming hazard events and to promote future self-reliance at state and local levels. The grant is open to any state, local and tribal governments to apply.</i></p>		
Flood Mitigation Assistance Grant (FMA)	FEMA	◆	
	<p><i>Description: To implement cost-effective measures that reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insured under the National Flood Insurance Program (NFIP).</i></p>		
Hazard Mitigation Grant Program (HMGP)	FEMA		◆
	<p><i>Description: To provide funds to states, territories, Indian tribal governments, and communities to significantly reduce or permanently eliminate future risks to lives and property from natural hazards. HMGP funds projects by priorities identified in the state or local hazard mitigation plans and enables mitigation measures to be implemented during the recovery from a disaster. West Virginia has traditionally funded the 25 percent match required for pre- and post-disaster FEMA mitigation grant projects. Typically, in other states, the local community must contribute between five and ten percent of the state’s share. However, this is difficult for most of West Virginia’s impoverished communities. By picking up the local share of the match, the State has demonstrated its commitment to its citizens.</i></p>		
Pre-Disaster Mitigation Grant (PDM)	FEMA	◆	
	<p><i>Description: To provide funds to states, territories, tribal governments, and communities for hazard mitigation planning and implementing mitigation projects before a disaster event. Funding these plans and projects reduces overall risks to the population and structures while reducing reliance on funding from disaster declarations.</i></p> <ul style="list-style-type: none"> • <i>City of Huntington grant for Fourpole Creek Pump Station Design and Engineering project valued at \$2,925,000</i> 		



Funding Program	Funding Agency	Pre-Disaster	Post-Disaster
	<ul style="list-style-type: none"> West Virginia Division of Emergency Management grant for West Virginia Water Treatment Plan Auxiliary Power Project valued at \$708,000 		
Assistance to Firefighters Grant Program	FEMA	◆	
	<i>Description: Grants to local fire departments to protect citizens and firefighters against the effects of fire and fire-related incidents</i>		
Cooperating Technical Partners (CTP) Program	FEMA	◆	
	<i>Description: With over 20,000 communities in the NFIP, there is a significant challenge keeping flood hazard maps current. The CTP Program is an innovative approach to creating partnerships between FEMA and participating NFIP communities, regional agencies, state agencies, tribes and universities that have the interest and capability to become more active participants in the FEMA flood hazard mapping program. Each fiscal year, the Federal Emergency Management Agency (FEMA) issues a Notice of Funding Opportunity (NOFO) document to announce the availability of the CTP cooperative agreement funding opportunity. The NOFO describes the available funding, priorities, requirements and process for eligible applicants to request funding for program activities.</i>		
Earthquake Hazards Reduction State Assistance Program	FEMA, National Earthquake Hazards Reduction Program (NEHRP)	◆	
	<i>Description: The Earthquake Hazards Reduction State Assistance Program is one part of FEMA's activities under the NEHRP Reauthorization Act of 2004, which directs the agency to support State efforts to mitigate seismic risks and thereby reduce future losses from earthquakes. FEMA provides program funds annually to states and U.S. territories that face serious earthquake hazards and that develop ways to effectively reduce risks posed by these hazards.</i>		
Fire Management Assistance Grant Program	FEMA		◆
	<i>Description: Grants for the mitigation, management, and control of fires on publicly or privately owned forests or grasslands, which threaten such destruction as would constitute a major disaster.</i>		
Fire Prevention and Safety Grant Program	FEMA	◆	
	<i>Description: Grants for projects that enhance the safety of the public and firefighters from fire and related hazards. The primary goal is to target high-risk populations and mitigate high incidences of death and injury.</i>		
High Hazard Potential Dam Grants	FEMA	◆	
	<i>Description: Funding is for states or territories with a dam classified as a high hazard dam. These grants provide technical, planning and construction assistance for rehabilitation of eligible dams. The last year West Virginia received HHPD funding was in 2019 for \$277,019, through their Department of Environmental Protection.</i>		
Homeland Security Grant Program	FEMA	◆	
	<i>Description: Grants to enhance the ability of states, territories, and urban areas to prepare for, prevent, and respond to terrorist attacks and other major disasters. Includes State Homeland Security Program, Urban Areas Security Initiative, Law Enforcement Terrorism Prevention Program, Metropolitan Medical Response System, and Citizen Corps Program grant programs.</i>		
Infrastructure Protection Program	FEMA	◆	
	<i>Description: Grants to strengthen the nation's ability to protect critical infrastructure facilities and systems. Includes Transit Security Grant Program, Port Security Grant Program, Intercity Bus Security Grant Program, Trucking Security Program, and Buffer Zone Protection Program grant programs.</i>		
National Dam Safety	FEMA	◆	



Funding Program	Funding Agency	Pre-Disaster	Post-Disaster
Program	<i>Description: National Dam Safety Program (NDSP). The NDSP, which is led by FEMA, is a partnership of the states, federal agencies, and other stakeholders to encourage individual and community responsibility for dam safety. Grant assistance to the states: Provides vital support for the improvement of the state dam safety programs that regulate most of the dams in the United States.</i>		
Public Assistance Grants	FEMA		◆
	<i>Description: Grants for the repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain private nonprofit organizations. Mitigation funding is available for work related to damaged components of eligible buildings/structures.</i>		
Transportation Trust Fund	Federal Highway Administration	◆	
	<i>Description: Transportation Trust Fund funds grants through a competitive application-based process administered by the Local Aid District Offices. County Aid Program- Administer the County Aid Program for road and bridge infrastructure improvements under county jurisdiction. Each county receives an annual formula based allotment that takes into consideration county road lane mileage and population. The County Aid Program is funded through the Transportation Trust Fund and provides funding for eligible costs of projects included in the county’s approved Annual Transportation Program.</i>		
Land and Water Conservation Fund	Land and Water Conservation Fund	◆	
	<i>Description: Funding to states for outdoor recreational development, renovation, land acquisition, and planning. Funding: The fund is authorized at \$900 million annually, a level that has been met only twice during the program’s 40-year history. The program is divided into two distinct funding pots: state grants and federal acquisition funds.</i>		
Nonstructural Alternatives to Structural Rehabilitation of Damaged Flood Control Works	U.S. Army Corps of Engineers		◆
	<i>Description: Direct planning and construction grants for nonstructural alternatives to the structural rehabilitation of flood control works damaged in floods or coastal storms.</i>		
Small Civil Works Projects; Continuing Authorities Program (CAP)	U.S. Army Corps of Engineers	◆	
	<i>Description: The Secretary of the Army has been delegated the authority to plan, design, and construct certain types of water resource and environmental restoration projects without specific Congressional authorization. Each authority has its own requirements and strict limits on responsibilities and financial contributions of the federal partners: (Section 14—Emergency Streambank and Shoreline Erosion; (2) Section 103—Hurricane and Storm Damage Reduction; (3) Section 107—Small Navigation Improvements; (4) Section 111—Shore Damage Attributable to Federal Navigation Projects; (5) Section 204—Regional Sediment Management & Beneficial Uses of Dredges Materials; (6) Section 205—Small Flood Damage Reduction Projects; (7) Section 206—Aquatic Ecosystem Restoration; (8) Section 208—Snagging and Clearing for Flood Control; (9) Section 1135—Project Modification for Improvement of the Environment (USACE no date). Submittal deadlines are typically in May-June. Cost shares are typically 50% for feasibility and 65% for construction. Most projects are less than \$15,000,000.</i>		
Assistance—Community Facility Direct Loans/Grants	U.S. Department of Agriculture	◆	
	<i>Description: Grants, direct and guaranteed loans, and technical assistance to construct, enlarge, or improve community facilities for healthcare, public safety, and public services in primarily low-income rural areas.</i>		
Farm Ownership Loans	U.S. Department of Agriculture	◆	



Funding Program	Funding Agency	Pre-Disaster	Post-Disaster
	<i>Description: Direct loans, guaranteed/insured loans, and technical assistance to farmers to develop, construct, improve, or repair farm homes, farms, and service buildings and to make other necessary improvements.</i>		
Guaranteed Single-Family Housing Loans (Section 502 Rural Housing Loans)	U.S. Department of Agriculture	◆	
	<i>Description: Also known as the Section 502 Direct Loan Program, this program assists low- and very-low-income applicants obtain decent, safe and sanitary housing in eligible rural areas by providing payment assistance to increase an applicant's repayment ability.</i>		
Rural Development Assistance—Housing	U.S. Department of Agriculture		◆
	<i>Description: Grants, loans, and technical assistance for addressing rehabilitation and health and safety needs in primarily low-income rural areas. Declaration of major disaster necessary.</i>		
Rural Development Assistance—Utilities	U.S. Department of Agriculture	◆	
	<i>Description: Direct and guaranteed rural economic loans and business enterprise grants to address utility issues and development needs.</i>		
Single-Family Housing Repair Loans and Grants (Section 504 Rural Housing Loans and Grants)	U.S. Department of Agriculture	◆	◆
	<i>Description: Repair loans, grants, and technical assistance for very low-income homeowners living in rural areas to repair their homes and remove health and safety hazards.</i>		
Post-Disaster Economic Recovery Grants and Assistance	U.S. Economic Development Administration		◆
	<i>Description: Grant funding to assist with the long-term economic recovery of communities, industries, and firms adversely impacted by disasters.</i>		
Emergency Management Performance Grand Program (EMPG)	U.S. Department of Homeland Security	◆	
	<i>Description: Grants are available to state, local, territorial, and tribal governments in preparing for all hazards. The Federal Government, through the EMPG Program, provides necessary direction, coordination and guidance, and provides necessary assistance, as authorized so that a comprehensive emergency preparedness system exists at all levels for all hazards.</i>		
Homeland Security Grant Program (HSGP)	U.S. Department of Homeland Security	◆	
	<i>Description: The Homeland Security Grant Program (HSGP) plays an important role in the implementation of the National Preparedness System by supporting the building, sustainment, and delivery of core capabilities essential to achieving the National Preparedness Goal of a secure and resilient nation. HSGP is composed of three interconnected grant programs including the State Homeland Security Program (SHSP), Urban Areas Security Initiative (UASI), and the Operation Stonegarden (OPSG). Together, these grant programs fund a range of preparedness activities, including planning, organization, equipment purchase, training, exercises, and management and administration. The State is only eligible for the SHSP components of the HSGP funding.</i>		
Community Development Block Grants Program (Non-entitled Communities) (WV Community Advancement and Development 2022)	U.S. HUD	◆	
	<i>Description: In the State, all counties and non-entitlement cities qualify for this program. The goals of the CDBG Program are to provide decent affordable housing, create suitable living environments, and create economic opportunities. Within the state, activities and projects funded by the program focus on the following objectives:</i>		
	<ul style="list-style-type: none"> • Increase multifamily rental housing for extremely low to moderate-income persons. • Support housing stability efforts by providers in the Continuum of Cares to ensure special needs persons can access services and housing. • Support the development of viable infrastructure systems (such as water, sewer, and storm water) and the development of improved sidewalks and streets to enhance living conditions and bolster economic development. 		



Funding Program	Funding Agency	Pre-Disaster	Post-Disaster
	<ul style="list-style-type: none"> Improve quality of life by enhancing public facilities and eliminating factors that affect environmental quality or public health. Improve quality of life by enhancing public facilities and eliminating factors that affect environmental quality or public health through activities such as mitigating blighted and abandoned properties, supporting the remediation of brownfield sites, and enhancing parks and recreational facilities. Develop local strategies through community planning to support improved living environments and strengthen economic and community development. Promote fair housing to educate low to moderate-income citizens about their rights to available and accessible housing. 		
Community Development Block Grants/ Entitlement Grants	U.S. HUD <i>Description: The Cities of Beckley, Charleston, Huntington, Martinsburg, Morgantown, Parkersburg, Vienna, Weirton, and Wheeling qualify for this program. Grants to entitled cities to develop viable communities (e.g., decent housing, suitable living environments, expanded economic opportunities), principally for low- and moderate-income persons. Activities as the same as for the non-entitled counties.</i>	◆	
Community Development Block Grant Disaster Recovery Program	U.S. HUD <i>Description: HUD provides flexible grants to help cities, counties, and states recover from presidentially declared disasters, especially in low-income areas, subject to availability of supplemental appropriations. In response to presidentially declared disasters, Congress may appropriate additional funding for the Community Development Block Grant (CDBG) Program as Disaster Recovery grants to rebuild the affected areas and provide crucial seed money to start the recovery process.</i>		◆
Community Development Block Grant—Section 108 Loan Guarantees	U.S. HUD <i>Description: Loan guarantees to public entities for economic development, housing rehabilitation, public facilities, and large-scale physical development projects (including mitigation measures).</i>	◆	
HOME Investment Partnerships Program	U.S. HUD <i>Description: Grants to states, local government, and consortia for permanent and transitional housing (including support for property acquisition, improvements, demolition, and relocation) for very low- and low-income persons.</i>	◆	
Public Housing Capital Fund Emergency/Natural Disaster Funding	U.S. HUD <i>Description: Funding to public housing agencies that confront an emergency situation or a natural disaster.</i>		◆
SBA Loan Programs	U.S. Small Business Administration <i>Description: Small Business Administration (SBA) provides low-interest disaster loans to homeowners, renters, businesses of all sizes, and most private nonprofit organizations. SBA disaster loans can be used to repair or replace the items damaged or destroyed in a declared disaster: real estate, personal property, economic injury, machinery and equipment, and inventory and business assets. Funding: Homeowners may apply for up to \$200,000 to replace or repair their primary residence. Renters and homeowners may borrow up to \$40,000 to replace or repair personal property—such as clothing, furniture, cars, and appliances – damaged or destroyed in a disaster. Physical disaster loans of up to \$2 million are available to qualified businesses or most private nonprofit organizations.</i>		◆
Hazardous Materials Emergency Preparedness Program	U.S. Department of Transportation <i>Description: Project grants and technical assistance to enhance hazardous materials emergency planning and training</i>	◆	



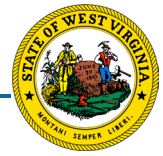
Funding Program	Funding Agency	Pre-Disaster	Post-Disaster
Reimbursement for Firefighting on Federal Property	U.S. Fish and Wildlife Service		◆
	<i>Description: Provides reimbursement only for direct costs and losses over and above normal operating costs.</i>		
Cooperative Forestry State Fire Assistance	U.S. Forest Service	◆	
	<i>Description: The Cooperative Forestry program manages a number of programs including The Forest Stewardship Program, The Forest Legacy Program, The Community Forest Program, The Urban and Community Forestry Program, Ecosystem Services and Markets, and Wood Innovations</i>		
The Forest Legacy Program	U.S. Forest Service	◆	
	<i>Description: Federal program in partnership with states supports efforts to protect environmentally sensitive forest lands. Designed to encourage the protection of privately owned forest lands, Forest Legacy is an entirely voluntary program. To maximize the public benefits it achieves, the program focuses on the acquisition of partial interests in privately owned forest lands. Forest Legacy helps states develop and carry out their forest conservation plans. It encourages and supports acquisition of conservation easements, legally binding agreements transferring a negotiated set of property rights from one party to another, without removing the property from private ownership. Most Forest Legacy Program conservation easements restrict development, require sustainable forestry practices, and protect other values. Funding: To qualify, landowners are required to prepare a multiple resource management plan as part of the conservation easement acquisition. The federal government may fund up to 75% of project costs, with at least 25% coming from private, state, or local sources. In addition to gains associated with the sale or donation of property rights, many landowners also benefit from reduced taxes associated with limits placed on land use.</i>		

FEMA STORM Act

The Safeguarding Tomorrow through Ongoing Risk Mitigation (STORM) Act was signed into law on January 1, 2021 and gave FEMA the authority to provide capitalization grants to states, tribes, Puerto Rico, and the District of Columbia to establish loan funding that includes hazard mitigation assistance to local governments to help reduce risks from natural hazards. This Act is unique because FEMA allows entities to make the funding decisions and award loans directly and allows entities to use loans as a cost match for another HMA grant. In addition, FEMA does not require a benefit-cost analysis to be submitted, nor do they limit project types beyond the limitations in the statute (FEMA 2022).

Small Business Administration (SBA)

The SBA was created in 1953 and was designed to aid and assist the interests of small business concerns to strengthen the overall economy by promoting resilient businesses. SBA consists of the State Trade Expansion Program (STEP), which provides financial awards to states and territories to assist with export development and supports globalization. SBA services include funding programs, loans, surety bonds, counseling, federal contracting certifications, and disaster recovery. West Virginia has two district offices to more efficiently assist residents of West Virginia, one located in Clarksburg and one located in Charleston (SBA n.d.).



Infrastructure Investment and Jobs Act

The Infrastructure Investment and Jobs Act is a piece of legislation introduced in 2021 designed to create millions of good-paying jobs by adding around 2 million jobs per year to achieve full employment. This act also is designed to protect critical labor standards on construction projects, grow wages in the clean energy industry, replace water pipes, ensure that more materials are made in America, support auto workers, invest in shifting energy markets, and authorize funds to highways and other transportation infrastructure (The White House n.d.).

Projects Submitted for FEMA Funding

During the performance period of the 2018 SHMP, West Virginia's total project costs on hazard mitigation projects were \$8,506,268, as shown in Table 6-6.



Table 6-6. FEMA Hazard Mitigation Assistance Projects Submitted for Funding During Performance Period of 2018 SHMP

Grant	DR# or Fiscal Year	Project Type	Subrecipient	Project County	Status	Total Project Cost
LPDM	LPDM-PJ-03-WV-2022-002	601.2: Generators	WVEMD	McDowell; Morgan	Obligated	\$944,133.33
BRIC	PDMC-PL-03-WV-2019-002	700.1: Management Costs – Salaries;	Eastern Panhandle Planning and Development Council	Berkeley; Morgan	Obligated	\$80,750.00
HMGP	4359	91.5: Local Multijurisdictional Multihazard Mitigation Plan – UPDATE	Nicholas (County)	Nicholas	Approved	\$316,219.00
HMGP	4517	601.2: Generators	Statewide	Kanawha	Approved	\$75,000.00
BRIC	PDMC-PL-03-WV-2019-001	602.1: Other Equipment Purchase and Installation	Belomar regional council	Marshall; Ohio; Wetzel	Obligated	\$129,921.44
HMGP	4359	904.1: Advanced Assistance	St. Albans	Kanawha	Approved	\$67,239.00
HMGP	4359	91.5: Local Multijurisdictional Multihazard Mitigation Plan – UPDATE	Kanawha (County)	Kanawha	Approved	\$843,350.00
HMGP	4359	601.2: Generators	Kanawha (County)	Kanawha	Approved	\$831,360.00
HMGP	4455	200.1: Acquisition of Private Real Property (Structures and Land) – Riverine	Nitro	Kanawha	Approved	\$195,290.00
HMGP	4603	200.1: Acquisition of Private Real Property (Structures and Land) – Riverine	St. Albans	Kanawha	Approved	\$603,000.00
HMGP	4517	200.6: Acquisition of Private Real Property (Structures and Land) – Landslide	Statewide	Brooke; Hancock	Approved	\$40,000.00
HMGP	4603	601.1: Generators	Statewide	Statewide	Approved	\$82,217.26
HMGP	4455	91.3: Local Multihazard Mitigation Plan – UPDATE	Statewide	Statewide	Approved	\$84,274.00
HMGP	4517	700.1: Management Costs – Salaries	Statewide	Statewide	Approved	\$890,542.00
HMGP	4359	700.4: Management Costs – Supplies	Statewide	Statewide	Approved	\$233,923.00
HMGP	4378	700.1: Management Costs – Salaries	Statewide	Statewide	Approved	\$43,279.00
HMGP	4359	700.2: Management Costs – Equipment;	Winfield	Putnam	Closed	\$44,310.38
HMGP	4359	700.4: Management Costs – Supplies	Buffalo	Putnam	Closed	\$83,163.00
BRIC	PDMC-PL-03-WV-2019-003	700.1: Management Costs – Salaries	B-C-K-P Regional Intergovernmental Council	Boone; Clay; Kanawha; Putnam	Obligated	\$100,000.00
HMGP	4359	700.2: Management Costs – Equipment	Putnam (County)	Putnam	Approved	\$237,142.00
HMGP	4517	700.3: Management Costs – Office Space Rental	Statewide	Grant; Hampshire; Hardy; Mineral; Pendleton	Approved	\$109,458.00



Grant	DR# or Fiscal Year	Project Type	Subrecipient	Project County	Status	Total Project Cost
HMGP	4517	700.4: Management Costs – Supplies	Statewide	Barbour; Braxton; Gilmer; Lewis; Randolph; Tucker; Upshur	Approved	\$115,000.00
HMGP	4359	700.1: Management Costs – Salaries	Rainelle	Greenbrier	Approved	\$264,492.00
HMGP	4455	700.2: Management Costs – Equipment	Greenbrier (County)	Greenbrier	Approved	\$109,140.00
HMGP	4359	700.4: Management Costs – Supplies	Statewide	McDowell; Mercer; Monroe; Raleigh; Summers; Wyoming	Approved	\$175,000.00
HMGP	4455	700.1: Management Costs – Salaries;	Mullens	Wyoming	Approved	\$103,975.00
HMGP	4359	700.2: Management Costs – Equipment	Ohio (County)	Ohio	Approved	\$251,500.00
HMGP	4359	700.4: Management Costs – Supplies	Statewide	Fayette; Greenbrier; Nicholas; Pocahontas; Webster	Approved	\$175,000.00
LPDM	LPDM-PL-03-WV-2022-001	601.2: Generators – Regular	City of Huntington WV	Cabell	Obligated	\$3,900,000.00
HMGP	4517	601.2: Generators – Regular	Statewide	Jefferson	Approved	\$60,000.00
HMGP	4359	700.4: Management Costs – Supplies	Preston (County)	Preston	Approved	\$307,020.00
HMGP	4378	91.5: Local Multijurisdictional Multihazard Mitigation Plan – UPDATE	Matewan	Mingo	Approved	\$159,560.00



OTHER STATE FUNDING FOR MITIGATION ACTIVITIES

Stream Partners Program

Stream Partners Program is supported by the WV Conservation Agency, WVDEP, WV Division of Natural Resources, and WVDOF. They grant up to \$5,000 to organizations wishing to follow the program’s purpose (WVDEP 2023). The program encourages citizens to work with state agencies to determine river/stream safety for recreational activities, if they can support commercial or public purposes, and if they are habitable for plants and animals (WVDEP 2023).

Green Streets, Green Jobs, Green Towns (G3) Grant Program

The G3 Grant Program is a collaborative grant program designed to address the Chesapeake Bay Protection and Restoration Executive Order on Green Streets, Jobs, and Towns. This grant program is funded by the United States Environmental Protection Agency Region III, WVDEP, and the Chesapeake Bay Trust to support the design and implementation of green streets, community greening, and urban tree canopy projects, in addition to white papers that address these topics. The program aims to support green infrastructure by creating local and county-level capacities to implement cost-effective projects. All communities located throughout the Chesapeake Bay watershed in West Virginia are eligible to apply (U.S. EPA 2022).

CRITERIA FOR PRIORITIZING PLANNING AND PROJECT GRANTS

The State can use the following criteria to rank planning and project proposals for FEMA mitigation grant funding programs. Past practices of the State have been to give the highest priority for funding for HMGP opportunities to the county where the event occurred and to give additional weight to those projects that propose a higher cost-share contribution. All counties are considered equal priorities for other mitigation grant programs, and projects are evaluated based on these criteria:

- **Environmental/Historic Preservation** — Must be environmentally sound and conform to Floodplain Management, Historical Preservation, and Protection of Wetlands and Endangered Species laws and regulations.
- **Resolve Significant Problems** — Addresses a problem that has been repetitive or a problem that poses a significant risk to public health and safety if left unresolved.
- **Long-Range** — The solution should be long-range.
- **Cost-Effective** — Cost-effective and substantially reduce the risk of future damage, loss, hardship, or suffering from a major disaster.
- **Priority in State Plan** — Types of projects which have been determined high priority for the State.
 - Hardening or retrofitting essential facilities such as fire stations, EOCs, communications facilities, schools, shelters, hospitals, etc.
 - Public awareness/education
 - Flood control and floodplain management to include the reduction of repetitive and severe repetitive loss properties
 - Development and/or improvement of warning systems



6.2.5 Summary of Changes in State Capabilities and Progress on Integration

West Virginia experiences challenges in enforcing and implementing capabilities. Not all communities have adopted the State Building Code. In addition, many communities do not have any zoning code, and enforcement is variable among communities that do. Lack of enforcement can lead to buildings in hazard areas that cannot withstand the impacts of those hazards.

The State has strengthened and enhanced its capabilities (as described below) over the performance period of the 2018 SHMP and has continued to progress on integration.

SUMMARY OF CHANGES IN STATE CAPABILITIES

The following descriptions are a sample of notable changes that have influenced or impacted the State's capabilities over the performance period of the 2018 SHMP:

- **Funding**
 - The State has been struggling to finish projects due to funding being stretched in so many different directions. In addition, projects that are complete need more money or staff to keep up with required long-term maintenance. The ability for smaller jurisdictions to start projects is difficult because many do not have the resources, staffing, and funding to find, apply for, and monitor grant applications. Capacity is also the most significant issue at the community and county levels. There needs to be more funding at the local level for local sponsors to be able to supply a match for local grants, which ends up pushing the match back onto the State, making this an ongoing issue. Nonfederal local match is also an issue because most communities can only use American Rescue Plan Act (ARPA) funds as a match. Federal money that can be used as a match is only available for some of the time. Most communities have already allocated ARPA money to different sectors.
- **Public Education and Information**
 - Agencies in the local sector lack information and education on how to create websites and how to maintain them to be of use to jurisdictions/counties and the public. Local jurisdictions also have expressed a need for more education opportunities so staff can provide a consistent message.
- **Staffing and Technical Resources**
 - Staffing is a significant contributor to challenges relating to the State's capabilities. Lack of staffing makes enforcing the building code and zoning regulations extremely difficult. In addition, lack of staffing puts more work onto the limited staff working on local and state levels. There has been a lack of enforcement of education requirements among staff. Some positions require a certain number of hours of continuing education and instruction to stay in good standing with the State. However, until recently, there has been no enforcement that these hours are being met.
 - There is a need for social media training because some communities and jurisdictions want to create a website with useful information.



PROGRESS ON INTEGRATION INTO STATE PROGRAMS

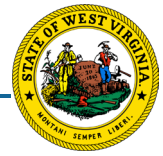
The success of the SHMP and the strategies presented rely on the continued support and effort of a wide range of stakeholders. Stakeholders were invited to participate in the mitigation planning process. Few of the 2018 SHMP mitigation actions were implemented over the performance period and are currently being carried over into the 2023 SHMP.

The State has used the 2023 SHMP Update as an opportunity to promote integration further:

- **Resource for County Local Hazard Mitigation Plans (LHMP)** — The WVEMD envisions the 2023 SHMP will serve as a reference for LHMPs to integrate risk assessment results to reduce work and focus on strengthening other areas of plans.
- **Goal Development** — Goals identified in LHMPs were used to inform the development of goals for the 2023 SHMP. Regional and county leaders worked with the State in goal development and plan development.
- **THIRA** — The THIRA is a three-step risk assessment process that helps communities understand their risks and what they need to do to address those risks by answering the following questions:
 - What threats and hazards can affect our community?
 - If they occurred, what impacts would those threats and hazards have on our community?
 - Based on those impacts, what capabilities should our community have?
- **State Preparedness Report** — The WVEMD will more fully integrate the updated mitigation goals into the 2023 State Preparedness Report.
- **West Virginia Mitigation Program Consultation** — The results of the mitigation program consultation conducted with FEMA Region 3 mitigation staff and WVEMD were used to identify challenges and opportunities to mitigation within the state and will be used in the future to help monitor progress on addressing challenges and identifying emerging issues.

Implementation of the 2018 SHMP mitigation strategies may be hampered for several reasons. Labor resources and funds are always in short supply and create temporary barriers to success. Lead agencies could experience a shift in priorities, fiscal constraints, or personnel changes due to unforeseen circumstances or leadership changes.

Several challenges to the State’s capability arose during the implementation period of the 2018 SHMP. These challenges were related to shifting agency staffing, proposed projects, and scarcity of resources, especially concerning the COVID-19 pandemic. Mitigation projects cannot be implemented without sufficient human and financial resources. Through its advisory committees, WVEMD and involved stakeholders attempted to ensure adequate resources to support the State’s mitigation initiatives. However, many activities were put on hold or delayed during an economic downturn when state and local financial resources were tight. Financial help can come from federal, state, or private entities.



6.2.6 Potential Improvements

Due to the lack of attendance for yearly required floodplain trainings, West Virginia would benefit from improved documentation and enforcement of required floodplain training. West Virginia would also benefit by regulating to higher floodplain standards to limit the effects of intense storms/flooding. There is also a desire for more integrated planning among local, county, regions, and state entities so that staff can be shared, and potential funding opportunities and grants can also be shared. The State wishes to focus on educating dam owners on risk potential; however, the DEP does not currently have the staffing and capacity to do so. There is also a desire to have real estate agents disclose to potential property buyers that a particular property is located in an inundation area.