



## SECTION 8. LOCAL GOVERNMENT PLANNING COORDINATION

### 2023 SHMP UPDATE CHANGES

- ❖ Discussion of the local and regional government planning coordination in the State of West Virginia (the State) has been revised and updated to reflect significant changes in the structure of emergency management since the 2018 SHMP.
- ❖ The Local Government Planning Coordination section has been reviewed, updated, and reformatted.
- ❖ The Capabilities section is broken out into three separate sections (Sections 6, 7, and 8 of this plan), rather than one section and one appendix as structured in the 2018 SHMP.

### 8.1 Resources for Local Hazard Mitigation Planning

**44 C.F.R. §201.3(c)(5) and §201.4(c)(4)(i):** The State must describe the process to support the development of approvable local government mitigation plans including how the state supports developing or updating FEMA-approvable mitigation plans, including the process used to provide training, technical assistance, and funding. The plan must include a brief summary of barriers to developing or updating, adopting, and implementing FEMA-approved local government mitigation plans and steps to remove barriers.

Mitigation plans form the foundation for a community’s long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction, and repeated damage. Requirements for local jurisdiction hazard mitigation plans are established in 44 Code of Federal Regulations (C.F.R.) §201.6, which states that local jurisdictions must demonstrate that proposed mitigation actions are based on a sound planning process that is inclusive of the whole community and accounts for the inherent risk and capabilities of the communities.

Within West Virginia, local jurisdictions address hazards and risk that could affect their area in local hazard mitigation plans (LHMP). These LHMPs serve to align the jurisdictions’ planning efforts to be in concert with the SHMP. Jurisdictions are encouraged to address the hazards unique to their community and ensure that any State planning requirements associated with the SHMP are included.

The West Virginia Emergency Management Division (WVEMD) provides support, training, and technical assistance to local jurisdictions throughout the planning and adoption process. In addition to support from WVEMD, there are multiple resources available at the federal level and from academic and non-governmental organizations. Due to the history of disasters throughout West Virginia, encouraging communities to assess their risk and adopt LHMPs is a priority. The following sections describe the support available for local hazard mitigation planning.



## STATE SUPPORT FOR THE UPDATE OF LOCAL HAZARD MITIGATION PLANS

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The WVEMD is committed to a comprehensive mitigation program that actively supports local mitigation planning by providing technical assistance such as workshops and training for both planning and post-disaster activities. The following sections describe how the State supports the development and update of FEMA-approvable local mitigation plans through planning support, funding opportunity education and outreach, training programs, and technical assistance.

### Planning Support and Technical Assistance

The WVEMD provides guidance and technical assistance to local jurisdictions upon request to support the update of LHMPs through the assistance of State planners, as needed and as resources are available. Generally, the WVEMD notifies each region of their upcoming plan expiration and works with them to identify a funding source for the plan update. The Division is committed to the continued funding of LHMPs through its State allocation of FEMA's Hazard Mitigation Assistance (HMA) grant programs, such as the Hazard Mitigation Grant Program (HMGP), Building Resilient Infrastructure and Communities (BRIC), Flood Mitigation Assistance (FMA), and Pre-Disaster Mitigation (PDM) Congressionally Directed monies. Local plan status is also regularly discussed at Emergency Management meetings. The type of technical assistance is flexible and is based on the particular needs and resources available to the local jurisdiction requesting the assistance.

The WVEMD is committed to this close level of support for local plan development and intends to continue to participate in local plan development over the performance period of the 2023 SHMP. WVEMD will continue to coordinate with FEMA Region III mitigation staff to encourage federal participation in plan development whenever possible.

### Funding Opportunity Education and Outreach

WVEMD participates in local meetings to share information with state-level entities so that they know what is taking place at the jurisdictional levels in order to provide support to localities for consultation and troubleshooting as well as create local training workshops as they see fit. The State also compiles hazard data at the state level so that distribution is uniform and consistent for local use. In addition, state-level entities provide support during plan implementation, monitoring, and evaluation to alleviate the burden to local entities.

The WVEMD ensures that local jurisdictions are educated on grant availability, developing grant applications, and managing mitigation funds. When funding opportunities become available, WVEMD notifies appropriate state and local agencies via email and other means and communicates opportunities. In addition, WVEMD has provided informative training in groups and online on benefit-cost analysis (BCA), the E-Grants system, the environmental and historic preservation (EHP) review process, the HMA program, and applicant briefings and trainings for the HMGP after FEMA disaster and emergency declarations. Over the performance period of the 2018 SHMP, education related to funding has been focused on the FEMA mitigation grant programs. Over the performance period of the 2023 SHMP, WVEMD will work to expand discussion and outreach for other programs that provide funds for mitigation activities.



## Training Offerings

The West Virginia State Code Section 15-5-20a: Floodplain Manager Training requires all local floodplain managers to complete 6 hours of training in floodplain management annually to maintain good standing with the State. In order to provide assistance for communities to meet this training requirement and to help local floodplain managers further augment their skill sets, WVEMD's Floodplain Management Section annually offers a multitude of training opportunities. Other trainings that the State and various state-level entities offer to assist local jurisdictions in hazard mitigation planning include natural disaster response and recovery trainings, dam seminars, flood response preparations, evacuation planning, threat and hazard identification and risk assessment (THIRA) workshops, Community Rating System (CRS) trainings, substantial damage estimation workshops, and homeland security workshops.

## FEDERAL SUPPORT FOR THE UPDATE OF LOCAL HAZARD MITIGATION PLANS

Federal support is available to assist with local mitigation planning by providing planning support documents and training for both planning and post-disaster activities. The following sections describe how the federal government supports the development and update of FEMA-approvable local mitigation plans through planning support, funding opportunity education and outreach, training programs, and technical assistance.

### Planning Support and Technical Assistance

FEMA has developed many tools to support hazard mitigation planning for local jurisdictions. Jurisdictions are encouraged to tailor the planning process to the needs and concerns of their community while using FEMA resources as guidance. In addition to guidance materials, the requirements for local hazard mitigation planning are established in 44 C.F.R. §201.6, and officially interpreted in the *FEMA Local Mitigation Planning Policy Guide* (effective April 19, 2023). FEMA's core guidance document is the *Local Mitigation Planning Handbook* (published March 2013), which provides a walkthrough of the planning process for local jurisdictions.

The *FEMA Local Mitigation Planning Policy Guide* is the official interpretation of federal regulations and statutes relevant to local mitigation planning. This guide replaces previous FEMA guidance from 2011, although the C.F.R. provisions relating to local planning requirements have not changed. The guide focuses on using local mitigation planning to assist local jurisdictions in whole community planning to build resilience through climate adaptation, land use, and economic development. The guiding principles informing this guidance are planning and investing in the future, collaborating and engaging all stakeholders and community members, and carrying out community planning based on local capabilities. LHMPs are required to include the following elements, each of which have certain requirements that must be met (FEMA 2022):

- Element A: Planning Process
- Element B: Hazard Identification and Risk Assessment
- Element C: Mitigation Strategy
- Element D: Plan Maintenance
- Element E: Plan Update
- Element F: Plan Adoption



- Element G: High Hazard Potential Dam (HHPD) (required for Rehabilitation of HHPD Grant Program)
- Element H: Additional State Requirements

The primary federal guidance tool for local jurisdictions to use in developing or updating LHMPs is the *FEMA Local Mitigation Planning Handbook*. The handbook assists local jurisdictions in meeting the requirements of 44 C.F.R. §201.6 by offering tools, worksheets, and real-world examples. Included in this publication are detailed descriptions and examples of how to meet each required planning element successfully in the LHMP.

### **Funding Opportunity Education Outreach**

Grants and funding are available for pre- and post-emergency or disaster-related projects. The funding is designed to support and enhance recovery, innovation, and mitigation to eligible communities, individuals, and institutions. Additionally, FEMA offers virtual webinars designed to help communities understand grant applications and federal regulations and how to build a successful planning grant application with information and resources related to obtaining planning grants. FEMA also provides a wealth of grant information on its website and organizes the information by types of grants and programs to make it easier for state and local entities to find funding that they are eligible for (FEMA 2023).

### **Training Offerings**

The Emergency Management Institute serves as the center of development and implementation of emergency management training and is designed to enhance the capabilities of federal, state, local, tribal, and territorial sectors to minimize the impacts of disasters. FEMA offers additional Independent Study training courses and programs, which can be taken online at little to no cost to state and governmental entities (FEMA 2023). Many of these training programs include numerous training modules designed to educate entities on a wealth of information, from introduction to hazard mitigation to application review and evaluation. Additional training modules are discussed in Table 8-1.

### **SUMMARY OF ADDITIONAL RESOURCES FOR LOCAL HAZARD MITIGATION PLANNING**

Table 8-1 lists federal, state, and regional resources that may be useful to developing LHMPs. Not all resources listed are applicable to all jurisdictions. New resources continue to be developed, so local planning teams should review FEMA, WVEMD, and other agency websites for additional resources during the hazard mitigation planning process.



**Table 8-1: Other Resources Supporting Local Hazard Mitigation**

Agency	Guidance/Tool	Resource Website
<b>General</b>		
<b>Regional Planning and Development Councils (RPDCs)</b>	Jurisdictions should review their current or previous LHMP at the beginning of the LHMP update process for background on previous goals and priorities, and to assess implementation of previous planned mitigation actions	<a href="https://emd.wv.gov/MitigationRecovery/Pages/Hazard-Mitigation-Planning.aspx">https://emd.wv.gov/MitigationRecovery/Pages/Hazard-Mitigation-Planning.aspx</a>
FEMA	Local Mitigation Planning Handbook	<a href="https://www.fema.gov/sites/default/files/2020-06/fema-local-mitigation-planning-handbook_03-2013.pdf">https://www.fema.gov/sites/default/files/2020-06/fema-local-mitigation-planning-handbook_03-2013.pdf</a>
FEMA	Local Mitigation Plan Review Guide	<a href="https://www.fema.gov/sites/default/files/2020-06/fema-local-mitigation-plan-review-guide_09_30_2011.pdf">https://www.fema.gov/sites/default/files/2020-06/fema-local-mitigation-plan-review-guide_09_30_2011.pdf</a>
FEMA	Mitigation Ideas	<a href="https://www.fema.gov/emergency-managers/risk-management/hazard-mitigation-planning/implementing">https://www.fema.gov/emergency-managers/risk-management/hazard-mitigation-planning/implementing</a>
FEMA	Training Modules: <ul style="list-style-type: none"> <li>• IS-318: Mitigation Planning for Local and Tribal Communities</li> <li>• IS-393 Introduction to Hazard Mitigation</li> <li>• G-318 Preparing and Reviewing Local Plans</li> <li>• G-393 Mitigation for Emergency Managers</li> </ul>	<a href="https://training.fema.gov/is/crslist.aspx?lang=en">https://training.fema.gov/is/crslist.aspx?lang=en</a>
Office of the Federal Register	Code of Federal Regulations (CFR), Title 44: Emergency Management and Assistance, Part 201 (44 C.F.R. §201)	<a href="https://www.ecfr.gov/current/title-44/part-201">https://www.ecfr.gov/current/title-44/part-201</a>
Beyond the Basics	A website designed to help guide the process of developing or updating an LHMP	<a href="http://mitigationguide.org/">http://mitigationguide.org/</a>
American Planning Association (APA)/FEMA	Planning Information Exchange	<a href="https://www.planning.org/nationalcenters/hazards/planninginformationexchange/">https://www.planning.org/nationalcenters/hazards/planninginformationexchange/</a>
<b>Element A—Planning Process/Element C—Mitigation Strategy/Element E—Plan Adoption</b>		
FEMA	Plan Integration: Linking Local Planning Efforts	<a href="https://www.fema.gov/sites/default/files/2020-06/fema-plan-integration_7-1-2015.pdf">https://www.fema.gov/sites/default/files/2020-06/fema-plan-integration_7-1-2015.pdf</a>
FEMA	Workshop: Planning for a Resilient Community	<a href="https://www.fema.gov/sites/default/files/documents/fema_planning-resilient-communities_fact-sheet.pdf">https://www.fema.gov/sites/default/files/documents/fema_planning-resilient-communities_fact-sheet.pdf</a>
FEMA	Integrating Historic Property and Cultural Resource Considerations into Hazard Mitigation Planning	<a href="https://www.fema.gov/pdf/fima/386-6_Book.pdf">https://www.fema.gov/pdf/fima/386-6_Book.pdf</a>
National Institute of Standards and Technology (NIST), U.S. Department of Commerce	NIST Community Resilience Planning Guide	<a href="https://www.nist.gov/community-resilience/planning-guide">https://www.nist.gov/community-resilience/planning-guide</a>
APA	Hazard Mitigation: Integration Best Practices into Planning	<a href="https://www.planning.org/publications/report/9026884/">https://www.planning.org/publications/report/9026884/</a>
APA	Policy Guide on Hazard Mitigation	<a href="https://www.planning.org/publications/report/9026884/">https://www.planning.org/publications/report/9026884/</a>



Agency	Guidance/Tool	Resource Website
APA	Planning for Post-Disaster Recovery: Next Generation	<a href="https://www.planning.org/research/postdisaster/">https://www.planning.org/research/postdisaster/</a>
<b>Plan Review, Evaluation, and Implementation</b>		
FEMA	2015 Hazard Mitigation Assistance Guidance	<a href="https://www.fema.gov/sites/default/files/2020-04/HMA_Guidance_FY15.pdf">https://www.fema.gov/sites/default/files/2020-04/HMA_Guidance_FY15.pdf</a>
FEMA	Grants Visualization Tool	<a href="https://www.fema.gov/about/reports-and-data/data-visualizations">https://www.fema.gov/about/reports-and-data/data-visualizations</a>
FEMA	Mitigating Flood and Drought Conditions Under Hazard Mitigation Assistance	<a href="https://www.fema.gov/grants/mitigation/hazard-mitigation-assistance-guidance">https://www.fema.gov/grants/mitigation/hazard-mitigation-assistance-guidance</a>
FEMA	Training Modules: <ul style="list-style-type: none"> <li>• IS-277 Benefit-Cost Analysis Entry Level</li> <li>• IS-212.b Introduction to Unified HMA</li> <li>• E-212 HMA: Developing Quality Application Elements</li> <li>• E-213 HMA: Application Review and Evaluation</li> <li>• E-276 Benefit-Cost Analysis Entry Level</li> </ul>	<a href="https://training.fema.gov/is/crslist.aspx?lang=en">https://training.fema.gov/is/crslist.aspx?lang=en</a> <a href="https://training.fema.gov/emi.aspx">https://training.fema.gov/emi.aspx</a>



## 8.2 Resources For Hazard Information and Assessment

There are numerous resources available at the state and federal levels to ensure that hazard information may be properly assessed and documented in order to supplement LHMPs. Hazard event records are documented at the federal level and can be used in conjunction with state resources to help supplement state-collected data and technology resources.

### STATE HAZARD ASSESSMENT RESOURCES

A local jurisdiction's initial hazard assessment should begin with a review of West Virginia's SHMP risk assessment chapters to determine which hazards are considered a priority for the State. The SHMP offers detailed descriptions of hazards impacting West Virginia as well as information on actions being taken by state-level agencies to address the identified hazards and additional planning and GIS resources available to assist local jurisdictions in strengthening their hazard mitigation efforts.

West Virginia and West Virginia University GIS Technical Center (WVU GISTC) continues to develop tools to support risk and vulnerability assessment and hazard mitigation planning using the most current technology and best-available data. These tools include guidance for GIS, toolkits to guide local vulnerability assessments, and hazard mapping tools. These resources allow users to easily begin to understand hazards in their community. They are designed to be user-friendly and do not require specialized training to use. Jurisdictions are encouraged to review the resources available and spend time exploring those that may assist their LHMP preparation efforts. WVU GISTC manages a data clearinghouse (<https://wvgis.wvu.edu/data/data.php>) that hosts open-source geospatial data that can be utilized for LHMPs. In addition, the West Virginia Flood Tool (<https://www.mapwv.gov/flood/>) is available to provide floodplain managers, insurance agents, developers, real estate agents, local planners, and citizens with an effective means by which to make informed decisions about the degree of flood risk for a specific area or property.

### FEDERAL HAZARD ASSESSMENT RESOURCES

FEMA, the U.S. Geological Survey (USGS), NOAA, and other federal agencies have developed many powerful tools that can be used to identify and assess hazards. These resources can be used independently or in coordination with state resources to assist local jurisdictions in identifying hazards that may affect their communities and to develop the basis for assessing the vulnerability of their communities. Many of these tools use GIS to determine the physical extents of hazards or estimate potential impacts.

### SUMMARY OF ADDITIONAL HAZARD INFORMATION AND ASSESSMENT RESOURCES

Table 8-2 lists federal, state, and regional resources that may be useful to jurisdictions in their risk assessments. Not all resources listed are applicable to all jurisdictions. New resources continue to be developed, so local planning teams should review FEMA, WVEMD, and other agency websites for additional resources during the hazard mitigation planning process.



**Table 8-2: Resources Supporting Hazard Information and Assessment**

Agency	Guidance/ Tool	Resource Website
<b>Resources for All Hazards</b>		
FEMA	Hazus	<a href="https://www.fema.gov/flood-maps/products-tools/hazus">https://www.fema.gov/flood-maps/products-tools/hazus</a>
FEMA	Risk Mapping, Assessment, and Planning Program (RiskMAP) Region III	<a href="https://www.fema.gov/about/organization/region-3">https://www.fema.gov/about/organization/region-3</a>
FEMA	Training Modules: <ul style="list-style-type: none"> <li>• IS-922 Application of GIS for Emergency Management</li> <li>• E-190 ArcGIS for Emergency Managers</li> <li>• E-296 Application of Hazus-MH for Risk Assessment</li> <li>• E-313 Basic Hazus-MH</li> </ul>	<a href="https://www.training.fema.gov/is/courseoverview.aspx?code=IS-922">https://www.training.fema.gov/is/courseoverview.aspx?code=IS-922</a> <a href="https://training.fema.gov/emcourses/emicalog.aspx?cid=E313&amp;ctype=R">https://training.fema.gov/emcourses/emicalog.aspx?cid=E313&amp;ctype=R</a>
<b>Resources for Seismic Hazards</b>		
FEMA	Earthquake Preparation	<a href="https://community.fema.gov/ProtectiveActions/s/article/Earthquake">https://community.fema.gov/ProtectiveActions/s/article/Earthquake</a>
Earthquaketrack	Earthquake Tracker and Measurement	<a href="https://earthquaketrack.com/p/united-states/west-virginia/recent">https://earthquaketrack.com/p/united-states/west-virginia/recent</a>
USGS	WV Seismic Hazard Map	<a href="https://www.usgs.gov/media/images/2014-seismic-hazard-map-west-virginia">https://www.usgs.gov/media/images/2014-seismic-hazard-map-west-virginia</a>
USGS	Shake Alert System Information	<a href="https://www.usgs.gov/programs/earthquake-hazards/science/earthquake-early-warning-overview">https://www.usgs.gov/programs/earthquake-hazards/science/earthquake-early-warning-overview</a>
FEMA/ USGS	ShakeOut	<a href="https://www.shakeout.org/southeast/">https://www.shakeout.org/southeast/</a>
Thinkhazard.org	Earthquake Loss Reduction Information	<a href="https://thinkhazard.org/en/report/3262-united-states-of-america-west-virginia/EQ">https://thinkhazard.org/en/report/3262-united-states-of-america-west-virginia/EQ</a>
<b>Resources for Flood Hazards</b>		
FEMA	National Flood Insurance Program (NFIP)	<a href="https://www.fema.gov/flood-insurance">https://www.fema.gov/flood-insurance</a>
FEMA	Community Rating System (CRS) 2017 User Manual and 2021 Addendum	<a href="https://www.fema.gov/sites/default/files/documents/fema_community-rating-system_coordinators-manual_2017.pdf">https://www.fema.gov/sites/default/files/documents/fema_community-rating-system_coordinators-manual_2017.pdf</a> <a href="https://www.fema.gov/sites/default/files/documents/fema_community-rating-system_coordinator-manual_addendum-2021.pdf">https://www.fema.gov/sites/default/files/documents/fema_community-rating-system_coordinator-manual_addendum-2021.pdf</a>
FEMA	Using National Flood Hazard Layer Web Map Service (WMS)	<a href="https://hazards.fema.gov/femaportal/wps/portal/NFHLWMSkmzdownload">https://hazards.fema.gov/femaportal/wps/portal/NFHLWMSkmzdownload</a>
FEMA	NFIP Technical Bulletins	<a href="https://www.fema.gov/emergency-managers/risk-management/building-science/national-flood-insurance-technical-bulletins">https://www.fema.gov/emergency-managers/risk-management/building-science/national-flood-insurance-technical-bulletins</a>
FEMA	Flood Risk Products: Using Flood Risk Products in Hazard Mitigation Plans	<a href="https://www.fema.gov/sites/default/files/2020-07/fema_using-flood-risk-products_guide.pdf">https://www.fema.gov/sites/default/files/2020-07/fema_using-flood-risk-products_guide.pdf</a> <a href="https://www.fema.gov/floodplain-management/manage-risk">https://www.fema.gov/floodplain-management/manage-risk</a>
FEMA	Hazard Mitigation Assistance 2015 and 2021 (HMA) Flood Retrofitting	<a href="https://www.fema.gov/sites/default/files/2020-04/HMA_Guidance_FY15.pdf">https://www.fema.gov/sites/default/files/2020-04/HMA_Guidance_FY15.pdf</a> <a href="https://www.fema.gov/book/hazard-mitigation-assistance-guidance">https://www.fema.gov/book/hazard-mitigation-assistance-guidance</a>
FEMA	Homeowners Guide to Retrofitting (2014)	<a href="https://www.fema.gov/sites/default/files/2020-08/FEMA_P-312.pdf">https://www.fema.gov/sites/default/files/2020-08/FEMA_P-312.pdf</a>





Agency	Guidance/ Tool	Resource Website
FEMA	Engineering Principles and Practices of Retrofitting Floodprone Residential Structures, 3rd Edition (2012)	<a href="https://www.fema.gov/sites/default/files/2020-08/fema259_complete_rev.pdf">https://www.fema.gov/sites/default/files/2020-08/fema259_complete_rev.pdf</a>
FEMA	Floodproofing Non-Residential Buildings	<a href="https://www.fema.gov/sites/default/files/2020-07/fema_p-936_floodproofing_non-residential_buildings_110618pdf.pdf">https://www.fema.gov/sites/default/files/2020-07/fema_p-936_floodproofing_non-residential_buildings_110618pdf.pdf</a>
FEMA	Coastal Construction Manual, 4th Edition (2011)	<a href="https://www.fema.gov/sites/default/files/2020-08/fema55_voli_combined.pdf">https://www.fema.gov/sites/default/files/2020-08/fema55_voli_combined.pdf</a>
FEMA	Training Modules	<a href="https://www.fema.gov/pdf/floodplain/is_9_complete.pdf">https://www.fema.gov/pdf/floodplain/is_9_complete.pdf</a> <a href="https://www.fema.gov/floodplain-management/community-rating-system">https://www.fema.gov/floodplain-management/community-rating-system</a>
Association of State Floodplain Managers (ASFPM)	Nationwide resources	<a href="https://www.floods.org/">https://www.floods.org/</a>
WV Floodplain Management Association	State resources	<a href="http://wvfma.org/cfm-program/">http://wvfma.org/cfm-program/</a>
<b>Resources for Fire Hazards</b>		
FEMA	Wildfire Mitigation Resources	<a href="https://www.ready.gov/wildfires">https://www.ready.gov/wildfires</a>
National Fire Protection Association	Codes and Standards	<a href="https://www.nfpa.org/Codes-and-Standards">https://www.nfpa.org/Codes-and-Standards</a>
U.S. Fire Administration	Data and National Fire Incident Reporting System (NFIRS) software and tools	<a href="https://www.usfa.fema.gov/nfirs/applications/">https://www.usfa.fema.gov/nfirs/applications/</a>
WV FIRE	Fire State Statute and Legislative Rules	<a href="https://firemarshal.wv.gov/about/Laws/Pages/default.aspx">https://firemarshal.wv.gov/about/Laws/Pages/default.aspx</a>
WV FIRE	State Fire Code	<a href="https://firemarshal.wv.gov/Divisions/Fire_Inspections/Pages/Plans-and-Review-Division.aspx">https://firemarshal.wv.gov/Divisions/Fire_Inspections/Pages/Plans-and-Review-Division.aspx</a>
WV FIRE	Fire Education	<a href="https://firemarshal.wv.gov/Divisions/Fire%20Services/Pages/Public-Education-Division.aspx">https://firemarshal.wv.gov/Divisions/Fire%20Services/Pages/Public-Education-Division.aspx</a>
Office of the State Fire Marshal	Community Risk Reduction Planning	<a href="http://riskreduction.strategicfire.org/">http://riskreduction.strategicfire.org/</a>
WV State Fire Marshal	Community Risk Assessment for WV	<a href="https://firemarshal.wv.gov/Divisions/Fire%20Services/Documents/Pub%20Ed/WV%20CRR%20ASSESSMENT%20Master.pdf">https://firemarshal.wv.gov/Divisions/Fire%20Services/Documents/Pub%20Ed/WV%20CRR%20ASSESSMENT%20Master.pdf</a>
Division of Forestry	Laws and regulations for Fire	<a href="https://wvforestry.com/laws-regulations/fire/">https://wvforestry.com/laws-regulations/fire/</a>
WV Fireman's Association	Training and Education for WV firefighters	<a href="https://www.wvsfa.org/">https://www.wvsfa.org/</a>
Joint Fire Science Program	Fire Science Program Website	<a href="https://www.firescience.gov/index.cfm">https://www.firescience.gov/index.cfm</a>
<b>Climate-Related Hazards—General Resources</b>		
American Association of State Climatologist (AASC)	General resources	<a href="https://Stateclimate.org/region/nrcc/">https://Stateclimate.org/region/nrcc/</a>
U.S. Federal Government	U.S. Climate Resilience Toolkit	<a href="https://toolkit.climate.gov/">https://toolkit.climate.gov/</a>
U.S. Global Change Research	2018 National Climate Assessment	<a href="https://science2017.globalchange.gov/">https://science2017.globalchange.gov/</a>
Intergovernmental Panel on Climate Change	Managing the Risk of Extreme Events and Disasters to Advance Climate Change Adaptation: Summary for Policy Makers	<a href="https://www.ipcc.ch/report/managing-the-risks-of-extreme-events-and-disasters-to-advance-climate-change-adaptation/">https://www.ipcc.ch/report/managing-the-risks-of-extreme-events-and-disasters-to-advance-climate-change-adaptation/</a>
FEMA	Climate Resilient Mitigation Activities for Hazard Mitigation Assistance	<a href="https://www.fema.gov/sites/default/files/documents/fema_resources-climate-resilience.pdf">https://www.fema.gov/sites/default/files/documents/fema_resources-climate-resilience.pdf</a>



Agency	Guidance/ Tool	Resource Website
<b>FEMA</b>	Green Infrastructure Methods Fact Sheet	<a href="https://www.mass.gov/doc/green-infrastructure-methods-fact-sheet/download">https://www.mass.gov/doc/green-infrastructure-methods-fact-sheet/download</a>
<b>Northeast Climate Adaptation Science Center (NE CASC)</b>	General resources	<a href="https://necasc.umass.edu/">https://necasc.umass.edu/</a>
<b>U.S. Department of Agriculture (USDA)</b>	WV Climate Change Agricultural Impacts	<a href="https://www.climatehubs.usda.gov/geographic-region/west-virginia">https://www.climatehubs.usda.gov/geographic-region/west-virginia</a>
<b>Georgetown Climate Center</b>	General resources	<a href="https://www.adaptationclearinghouse.org/">https://www.adaptationclearinghouse.org/</a>
<b>American Planning Association (APA)</b>	Climate Change Resources	<a href="https://www.planning.org/resources/climatechange/">https://www.planning.org/resources/climatechange/</a>
<b>Extreme Heat-Specific Resources</b>		
<b>U.S. Environmental Protection Agency (U.S. EPA)</b>	Urban Heat Islands	<a href="https://www.epa.gov/heatislands">https://www.epa.gov/heatislands</a>
<b>National Weather Service</b>	HeatRisk Forecast	<a href="https://www.weather.gov/safety/heat-index">https://www.weather.gov/safety/heat-index</a>
<b>Drought-Specific Resources</b>		
<b>Centers for Disease Control and Prevention (CDC)</b>	Preparing for the Health Effects of Drought	<a href="https://www.cdc.gov/nceh/hsb/cwh/docs/CDC_Drought_Resource_Guide-508.pdf">https://www.cdc.gov/nceh/hsb/cwh/docs/CDC_Drought_Resource_Guide-508.pdf</a>
<b>WV Emergency Management</b>	Emergency Operations Plan	<a href="https://emd.wv.gov/Preparedness/Resources/Documents/WV%20EOP%202016/IS%2006%20-%20Drought%20FINAL%201-6-16.pdf">https://emd.wv.gov/Preparedness/Resources/Documents/WV%20EOP%202016/IS%2006%20-%20Drought%20FINAL%201-6-16.pdf</a>
<b>WV Emergency Management</b>	Drought Information and Quick Links	<a href="https://emd.wv.gov/Preparedness/Pages/Drought-Information.aspx">https://emd.wv.gov/Preparedness/Pages/Drought-Information.aspx</a>
<b>NOAA</b>	WV Drought Monitor	<a href="https://www.drought.gov/States/west-virginia">https://www.drought.gov/States/west-virginia</a>
<b>USGS</b>	Chesapeake Bay Watershed	<a href="https://www.usgs.gov/tools/geonarrative-nontidal-network-mapper">https://www.usgs.gov/tools/geonarrative-nontidal-network-mapper</a>



## 8.3 State Review, Coordination, and Linkage with Local Plans

**44 C.F.R. §201.3(c)(6), §201.4(c)(2)(ii), §201.4(c)(3)(iii), and §201.4(c)(4)(ii):** The State Plan must describe the process and time frame to review, coordinate, and link local mitigation plans with the state mitigation plan including describing the state’s process and timeframe to review and submit approvable local mitigation plans to FEMA and share risk assessment data and mitigation priorities with local governments for their plan updates.

An LHMP is required to describe the planning process, the assessment of hazards and risks, the involvement of participating entities, action items, and a maintenance strategy. Local jurisdictions must use FEMA’s Plan Review Tool to navigate the required components for submitting their LHMPs. FEMA and the State review the plans in accordance with the required elements and provide necessary technical assistance that will lead to an approved plan. For a local plan to receive approval by the State, it needs to be in concert with the State’s mitigation priorities and efforts.

The required LHMP elements related to hazard identification and vulnerability offer an opportunity for integration of state and local planning. The SHMP provides information on known natural and technological hazards and the general location and vulnerability aspects of each hazard.

Using a consistent set of goals and objectives also reinforces the plan integration process. The 2023 SHMP includes an updated set of goals, objectives, and actions that can be adopted or adapted by local jurisdictions to guide their LHMP development. In turn, when reviewing and evaluating LHMPs, reviewers have the opportunity to ensure that local goals, objectives, and actions are consistent with those of the State and that local concerns are reflected in the State’s overall goals, objectives, and actions.

WVEMD is committed to building its hazard mitigation program to support a coordinated approach to mitigation within the State. This will occur through coordinated and linked SHMP and LHMPs. The following sections describe the process for LHMP review and the process to coordinate and link the SHMP and LHMPs, identify barriers for LHMP development and suggested solutions, describe the criteria for prioritizing mitigation planning and project grants, and outline the strategy for continued planning.

### LOCAL HAZARD MITIGATION PLAN STATUS

Table 8-3 lists the status of the LHMPs, including adoption and expiration dates.

*Table 8-3: Status of LHMPs in the State*

Regions	Counties Included	Approval Date	Expiration Date
Region 1	McDowell, Mercer, Monroe, Raleigh, Summers, Wyoming	August 10, 2022	August 9, 2027
Region 2	Cabell, Lincoln, Logan, Mason, Mingo, Wayne	April 26, 2018	April 25, 2023
Region 3	Boone, Clay, Kanawha, Putnam	October 10, 2022	October 19, 2027
Region 4	Fayette, Greenbrier, Nicholas, Pocahontas, Webster	September 7, 2022	September 6, 2027



Regions	Counties Included	Approval Date	Expiration Date
Region 5	Calhoun, Jackson, Ritchie, Roane, Pleasant, Tyler, Wirt, Wood	January 12, 2023	January 11, 2028
Region 6	Doddridge, Harrison, Marion, Monongalia, Preston, Taylor	April 30, 2018	April 29, 2023
Region 7	Barbour, Braxton, Gilmer, Lewis, Randolph, Tucker, Upshur	July 5, 2018	July 4, 2023
Region 8	Hardy, Hampshire, Grant, Mineral, Pendleton	October 10, 2018	October 9, 2023
Region 9	Berkeley, Morgan	February 1, 2022	January 31, 2027
Region 10	Marshal, Ohio, Wetzel	November 3, 2022	November 2, 2027
Region 11	Brooke, Hancock	February 1, 2018	January 1, 2023
Jefferson County	Jefferson	January 15, 2019	January 14, 2024

Note: Status as of May 2023

### PROCESS FOR LHMP REVIEW AND SUBMISSION TO FEMA

The WVEMD works closely with the regions to develop and update the LHMPs and is committed to continuing this close working relationship. This commitment includes early and ongoing technical assistance before and during the plan development process. The State is positioned to provide informal reviews as well as a formal review prior to submittal to FEMA. This level of involvement reduces the uncertainty in the plan review process when local plans are submitted to the State for review and ultimately reduces the number of plan revisions required to achieve ‘Approvable Pending Adoption’ notification from FEMA.

The State has not developed any additional planning requirements for LHMPs, so the FEMA Region III Plan Review Tool provides the complete set of plan requirements. Typically, plan reviews are conducted by the State in less than 45 days, and WVEMD will continue to strive for a shorter review period whenever staffing and resources allow.

There is currently no defined, formalized process for a plan that does not meet all requirements after the State’s review. The State will work with the region to address any identified issues. At the time of the 2023 SHMP’s development, WVEMD is developing, documenting, and implementing an established protocol to work together with the regions in a coordinated manner. WVEMD envisions that this protocol will involve:

- A memorandum of understanding with defined roles and responsibilities signed at the beginning of a plan update process.
- Formal transmission of the plan to the State for review.
- In the event that there are any requirements determined to have not been met, the WVEMD will formally transmit the plans back to the county with required changes noted.
- When all requirements are met to the satisfaction of WVEMD, WVEMD will transmit the LHMP to FEMA Region III.



The Hazard Mitigation Officer (HMO) serves as the lead plan reviewer at the time of this plan update. It is anticipated that an additional WVEMD staff person will assist with plan reviews. The counties and FEMA Region III will be notified via writing if the lead plan reviewer changes.

## PROCESS TO COORDINATE AND LINK STATE AND LOCAL PLANS

Local jurisdictions can use FEMA’s Plan Review Tool to assist in navigating the required components for submitting an LHMP. FEMA and the State are responsible for determining current guidance that leads to an approved plan.

Local jurisdictions assemble a plan consistent with current guidance and submit the plan to WVEMD for the State’s review. Upon receiving the State’s review comments, the plan is then submitted to FEMA for review and formal approval. FEMA will issue an “Approvable Pending Adoption” letter and the local jurisdiction will then adopt the plan in order to receive formal approval from FEMA.

The local plan must describe the planning process, assessment of hazards and risk, participating entities and community involvement, identification of action items, and maintenance strategy. The required LHMP elements related to hazard identification and vulnerability offer an opportunity for integration of state and local planning. The SHMP provides information on known natural and man-made hazards in West Virginia and the general location and vulnerability aspects of each hazard. Local jurisdictions can incorporate this general information into the hazard identification and vulnerability portion of their LHMP and supplement with local knowledge, data, and tools, such as the WV Flood Tool.

During the performance period of the 2018 SHMP, WVEMD facilitated linking LHMPs and the SHMP through reviews of LHMPs and providing feedback and resources on hazard identification, the risk assessment, and the vulnerability assessment of local plans. As a result of the State working with the RPDCs to develop risk and vulnerability assessments for their LHMPs, the regions included the State’s critical facilities and lifeline infrastructure in their risk and vulnerability assessments.

The State recognizes the benefits of developing the 2023 SHMP update and local mitigation plans in a more integrated manner, which ultimately can result in improving resilience in West Virginia. The 2023 SHMP update strives to develop a framework, including a risk assessment methodology, upon which LHMPs can build their update. WVEMD has developed the 2023 SHMP update to be a resource for the development of LHMPs to improve their overall effectiveness. Specifically, the 2023 SHMP coordinates risk assessment and mitigation strategy information as follows:

- Includes an enhanced risk assessment that:
  - Consists of extensive outreach and coordination to ensure best-available data, methodologies, and science were utilized
  - Assessed local vulnerability and conducted local hazard ranking utilizing a holistic approach to prioritize the updated mitigation strategy
  - Included enhanced coordination among sectors as part of the planning process to maximize planning efforts and to inspire continued collaboration and implementation beyond the 2023 SHMP update process
  - Included high priority mitigation actions identified at the local level in the State mitigation strategy (see Section 6 [Mitigation Strategy])



The 2023 SHMP will serve as a catalyst for all LHMPs to be updated. WVEMD envisions that this will allow for wise use of resources and better coordination of risk assessment and mitigation strategies among the local jurisdictions and with the State.

### EVALUATION OF PRIOR APPROACH TO LOCAL ASSISTANCE AND COORDINATION

Since the enactment of the *Disaster Mitigation Act of 2000*, every county in West Virginia has submitted a FEMA-approved hazard mitigation plan. The 2018 SHMP did not include a formalized, established approach to prioritize local assistance nor did it provide guidance on steps to take to encourage affected communities to update their plans to reflect changes in vulnerability or in the State’s priorities following a major disaster declaration.

However, the 2018 plan states that West Virginia does provide technical assistance and guidance to local communities prior to the plan update and submittal to FEMA at the state level. Additionally, over the performance period of the 2018 SHMP, WVEMD notified and assisted local jurisdictions of grant funding availability prior to plan expiration and provided LHMP assistance upon request.

### BARRIERS TO LOCAL PLAN DEVELOPMENT AND SUGGESTED SOLUTIONS

At the time of this plan update, all regions and counties have adopted and approved LHMPs. Some of the regions are updating or need to update their LHMP because it has or will soon expire. Local jurisdictions depend heavily on the RPDCs to provide subject matter expertise and facilitate the development of the LHMPs. The RPDCs experience turnover and challenges with staffing capacity, capabilities, and funding resources. Although these are common challenges identified across various communities regarding developing LHMPs, they are particularly pronounced in West Virginia due to limited state funding to fill these gaps. Additionally, the RPDCs have a wide variety of responsibilities and may require additional staffing in the future to support the development and subsequent implementation of LHMPs.

If funding resources currently being used for plan updates are no longer available or are significantly delayed, this may be a significant barrier for local plan development in the future. The WVEMD is committed to supporting local plan updates via FEMA HMA grants. It is the goal of WVEMD to assist and help local jurisdictions in creating an updated LHMP with plans to share and utilize resources across county lines.

## 8.4 Prioritization of Project Grants

**44 C.F.R. §201.4(c)(4)(iii):** The State Plan must describe the criteria for prioritizing funding communities and local jurisdictions that would receive planning and project grants under available funding programs which should include consideration for communities with the highest risks, repetitive loss properties, and most intense development pressures. Further, that for non-planning grants, a principal criterion for prioritizing grants shall be the extent to which benefits are maximized according to a cost benefit review of proposed projects and their associated costs.

WVEMD administers the State’s hazard mitigation program; however, hazard mitigation is a shared responsibility between state agencies, county governments, the private sector, and non-governmental organizations within the State, including local residents.



The State reviews, ranks, and prioritizes project proposals submitted by state departments and local jurisdictions for FEMA grant funding programs. WVEMD receives grant applications from eligible subapplicants and reviews the applications for completeness. Once reviewed, WVEMD will ensure the subapplicant has applied to the most appropriate grant program or make a recommendation for a program that is a better fit for the project.

In conjunction with the Governor's Office, WVEMD will rank and prioritize the grant applications. The ranking criteria have evolved over the performance period of the 2018 SHMP as the mitigation capabilities and the WVEMD staff have changed. Although specific ranking and prioritization criteria may change from grant to grant or disaster to disaster, the following guiding principles are utilized:

- **Life Safety** — Does the proposed activity provide an increased level of protection and contribute to public safety?
- **Geographic Area Impacted** — Is the proposed activity located in a hazard-prone area, such as a repetitive loss area or an area susceptible to landslides?
- **Emergency Power Back-up for Community Lifelines** — Does the project provide back-up power to critical facilities and services in the community, specifically for water and sanitation facilities and services?

### STRATEGY FOR CONTINUED PLANNING

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The WVEMD has reviewed and conducted a comprehensive evaluation of the State's hazard mitigation program and has identified opportunities for a number of enhancements, which have been included as actions in the mitigation strategy and included in the plan implementation and maintenance strategy. WVEMD, with the help of the local jurisdictions, will continue to refine and enhance the program to best meet the needs of the State over the performance period of the 2023 SHMP.