



The Central Virginia Planning District Hazard Mitigation Plan 2020 is a revision to the Region 2000 Hazard Mitigation Plan, completed and adopted by FEMA in 2013. The original Hazard Mitigation Plan (HMP) was developed for the Central Virginia Planning District Commission (CVPDC), then the Region 2000 Local Government Council, was written in 2006. While this HMP represents an update to the 2013 plan, it has been developed and designed such that it looks, feels, and reads differently than the previous version. As such, this regional hazard mitigation document has been developed as though it is the first regional plan and does not directly build upon or maintain past mitigation strategies. This is due to several factors including: availability of new hazard that information and data drives new considerations of risk, the region has matured and new capabilities are now available, this plan was developed with expanded stakeholder participation, and uses a new format to allow readers to more easily understand the content. In addition, the previous Hazard Mitigation Plan included several action items that have been completed, creating an opportunity for developing new mitigation strategies. Finally, the CVPDC HMP 2020 incorporates a corresponding interactive website that allows for real-time review of hazard data, a detailed plan and mitigation strategy oversight program, and a format for continued public engagement and participation.

Mitigation is defined as "the action of lessening in severity or intensity". Hazard mitigation focuses on lessening the severity and intensity of identified hazards as well as protecting life and property. An HMP identifies specific measures to be taken by a community to reduce their vulnerability from future hazard events and shorten the recovery time. The HMP is created through a planning process with input from citizens, business owners, public safety officials, and other stakeholders.

In 2006 and 2012, the Center for Geospatial Information Technology (CGIT) at Virginia Tech was contracted by Virginia Region 2000 Local Government Council to carry out the original and first update of Hazard Mitigation Plan. This 2020 update was also contracted with the CGIT, with contribution by Sobis, Inc. Funding for the project was provided through a grant from the Virginia Department of Emergency Management (VDEM) and Federal Emergency Management Agency (FEMA) with the appropriate match made by each locality in CVPDC.

This HMP update includes an updated list of identified natural, technological, and man-made hazards that are a threat to the CVPDC area; an update to the evaluation and analysis of the risks to each jurisdiction in CVPDC; a strategy for long and short-term mitigation of identified natural hazards; and a process for ongoing review and maintenance of the HMP. With these updated items, the plan follows the requirements for local mitigation planning as required under Section 322 of the Robert T. Stafford Act (42U.S.C. 5165) and 44 CFR Part 201 as the necessary components of a local hazard mitigation plan and the new regulations for the program per 2019.<sup>1</sup>

The Project Management Team, defined in Table 1, reviewed each section of the plan to ensure that each section adequately served their communities.

of June 2019. <u>https://www.fema.gov/media-library/assets/documents/15271</u>

<sup>&</sup>lt;sup>1</sup> Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, and Related Authorities as



The adoption of the CVPDC HMP 2020 by the participating jurisdictions assures continuing entitlement for FEMA and other federally-funded grant assistance through the Hazard Mitigation Grant Program (HMGP), the Building Resilient Infrastructure and Communities (BRIC) Program, the Flood Mitigation Assistance (FMA) Program, and Rehabilitation of High Hazard Potential Dam Grant Program.

#### Jurisdictions

The CVPDC HMP covers the following jurisdictions:

COUNTIES	TOWNS
Amherst County	Town of Altavista
Appomattox County	Town of Appomattox
Bedford County	Town of Amherst
Campbell County	Town of Bedford
CITIES	Town of Brookneal
City of Lynchburg	

The CVPDC HMP and the 2020 update fulfills the requirements of Sections 201.6(a)(3) and 201.6(c)(5) of the Disaster Mitigation Act of 2000 as administered by the VDEM and FEMA, for multijurisdictional planning participation and adoption.

This plan is awaiting evaluation and approval from FEMA before it can be evaluated and adopted by the eleven participating local governments. Resolutions will be added to this HMP as Appendix A: Adoption Resolutions upon approval by FEMA.

### Participation

All jurisdictions listed in the above section of the CVPDC HMP participated in the creation of the original plan and the two updates to the plan. The project management team was made up of local officials from each jurisdiction, State agencies, universities and colleges, and non-profits.

Participation in the update included a series of project management team meetings to review and update the plan. In addition, a public survey was administered, and two public meetings held to provide the public information and the opportunity to provide input into the mitigation plan.

Each of the jurisdictions in this plan was represented elected officials and/or staff from the locality with knowledge of planning, public works, and emergency response. The membership of the project management team is in accordance with the requirements of Section 44 CFR 201.6(b)(2) for a multi- jurisdictional plan and the members are listed in the table below.



#### Project Management Team Members

Representative	Title	Jurisdiction / Organization		
Kelly Hitchcock	Planning and Development Coordinator	CVPDC		
Sharon Williams	Community Development Director	Altavista, Town of		
Thomas Fore	Director of Public Utilities	Altavista, Town of		
Samuel Bryant	Director, Fire Chief - Marshal	Amherst County Public Safety		
Robert "Bob" Hopkins	Director of Public Utilities	Amherst County Service Authority		
Sara Carter	Town Manager	Amherst, Town of		
Johnnie Roark	Director of Community Development	Appomattox County		
Bobby Wingfield	Public Safety Director, Emergency Manager Coordinator	Appomattox County		
Jeff Elder	Director of Operations	Appomattox, Town of		
Gary Shanaberger	Town Manager	Appomattox, Town of		
Jack Jones	Chief of Department, Dept. of Fire & Rescue	Bedford County		
Jeff Johnson	Director of Emergency Communications	Bedford County		
Mary Zirkle	Economic Development Coordinator	Bedford, Town of		
Mike Crews	Public Works Director	Brookneal, Town of		
Jonaaron Evans	Communications Technician	Campbell County		
Tracy Fairchild	Director/Emergency Coordinator, CC Public Safety	Campbell County		
Myra Simpson	Deputy-Director of Public Safety	Campbell County		
Melissa Foster	Director, Dept. of Emergency Services	Lynchburg City		
Erin Hawkins	Water Quality Manager, Water Resources Dept.	Lynchburg City		
Jeff Martin	Assistant Director, Water Resources Dept.	Lynchburg City		
Piper VanDePerre	Emergency Programs Specialist, Dept. of Emergency Services	Lynchburg City		
Curt Whitlock	Managing Director Accreditation, Safety & Security	Centra Health		
Brittany Powell	Local Health Emergency Coordinator	VDH - Central Virginia Health District		
Christopher Bruce	All-Hazards Emergency Planner	VDEM Region 3		
Jonathan Simmons	All-Hazards Emergency Planner	VDEM Region 6		
Lauren Pillow	Hazardous Waste Inspector	VA DEQ		
Gregory Bennett	Director Health & Environmental Safety	Liberty University		
Ralph Lawson	Disaster Program Manager	Red Cross - Virginia Region		
Bob Driskill	Director, Office of Campus Safety	University of Lynchburg		

### Hazard Identification and Risk Assessment (HIRA)

The purpose of the HIRA is to:

- Identify and profile the hazards that could affect the jurisdictions in the CVPDC area,
- 2. Determine which community assets are the most vulnerable to damage from these hazards, and
- 3. Estimate social, economic, and environmental losses from these hazards and prioritize the potential risks to the community.

All jurisdictions in the CVPDC area are vulnerable to natural, technological, and man-made hazards



that threaten the safety of residents, and have the potential to damage or destroy both public and private property, cause environmental degradation, or disrupt the local economy and overall quality of life. While many disasters are possible for any given area in the United States, the most likely hazards to potentially affect the communities in the CVPDC area generally include the hazards in the 2020 plan update. A ranking analysis was used to help identify which hazards should be considered a priority in the region. The results of this analysis can be found below.

Drought, flooding, and urban fire hazards were ranked highest hazard risk, although it should be noted that the urban fire hazard may not be a priority for non-urban jurisdictions. The extreme temperatures, hailstorm, hurricane, severe thunderstorm, severe winter storm, tornado, wildfire, dam failure, and hazmat incident all ranked as moderate. Earthquake, fog, land subsidence/karst, and landslide hazards are ranked as low.

Hazards	Probability	Impact	Spatial Extent	Warning Time	Duration	Value	Rank
Drought	3	3	4	1	4	3.1	High
Earthquake	1	1	4	4	1	1.9	Low
Extreme Cold	3	2	4	1	3	2.7	Mod.
Extreme Heat	4	2	4	1	3	3	Mod.
Flooding	4	4	2	4	2	3.4	High
Fog	4	1	1	2	1	2	Low
Hailstorm	4	2	4	3	1	3	Mod.
Hurricane	2	3	4	1	1	2.5	Mod.
Land Subsidence/ Karst	1	1	1	4	1	1.3	Low
Landslide	2	2	1	4	1	1.9	Low
Severe Thunderstorm	4	2	4	2	1	2.9	Mod.
Sever Winter Storm	4	2	4	1	3	3	Mod.
Tornado	3	3	1	4	1	2.5	Mod.
Wildfire	4	2	1	4	3	2.7	Mod.
Dam Failure	2	3	1	4	2	2.3	Mod.
Hazmat Incident	3	2	1	4	2	2.3	Mod.
Urban Fire*	4	4	1	4	1	3.1	High

Final Hazard Ranking of Hazards for the CVPDC Region

\*For CVPDC urban areas.



### Capabilities

The capability assessment serves as a guide to the communities on their existing capacity and limitations to implement policy and programmatic mitigation actions. Local capabilities analysis serves as the foundation for designing an effective hazard mitigation plan, that builds on measures already in place, detects capacity gaps, and provides a foundation for effective mitigation strategy implementation.

Part of this section involves the jurisdictions conducting their own self-assessment. A general summary of the self-assessment is provided in the table below.

Jurisdiction	Planning Capabilities	Legal Capabilities	Technical Capabilities	Administrative Capabilities	Fiscal Capabilities
Amherst County	Few Planning Gaps	Legal Authority	Some Programs and Certifications	Adequate In-House and Contract Staffing and Expertise	\$50M Budget (2020)
Town of Amherst	Some Planning Gaps	Legal Authority	Few Programs and Certifications	Adequate In-House and Contract Staffing and Expertise	\$3.4M Budget (2020)
Appomattox County	Some Planning Gaps	Legal Authority	Some Programs and Certifications	Adequate In-House and Contract Staffing and Expertise	\$41.9M Budget (2020)
Town of Appomattox	Some Planning Gaps	Legal Authority	Few Programs and Certifications	Adequate In-House and Contract Staffing and Expertise	\$2.7M Budget (2020)
Bedford County	Few Planning Gaps	Legal Authority	Some Programs and Certifications	Adequate Staffing and Expertise	\$110M Budget (2020)
Town of Bedford	Some Planning Gaps	Legal Authority	Few Programs and Certifications	Adequate Staffing and Expertise	\$30.2M Budget (2020)
Campbell County	Some Planning Gaps	Legal Authority	Few Programs and Certifications	Adequate Staffing and Expertise	\$81M Budget (2020)
Town of Altavista	Some Planning Gaps	Legal Authority	Some Programs and Certifications	Adequate Staffing and Expertise	\$4.1M Budget (2020)
Brookneal	Some Planning Gaps	Legal Authority	Few Programs and Certifications	Adequate Staffing and Expertise	\$1.4M Budget (2020)
Lynchburg City	Few Planning Gaps	Legal Authority	Several Programs and Certifications	Robust Staffing and Expertise	\$179M Budget (2020)



#### Mitigation

The Mitigation Strategy section presents goals, objectives, and specific actions that assist in minimizing the vulnerability and impact of natural and man-made hazards. The mitigation strategies are meant to be comprehensive with both regional and location-specific actions while at the same time being feasible based on the regional and jurisdictional capabilities.

CVPDC set up working group meetings with the Program Management Team to identify regional mitigation goals, objectives, and actions. A goal for each type of mitigation strategy and supporting objectives, based on regional needs and capabilities is presented. Recognizing that each jurisdiction has specific needs, jurisdictionspecific mitigation actions were developed and are presented in Jurisdiction-Specific Mitigation Actions Section of this Plan. The following regional goals were identified. Regional mitigation actions are identified in the table below. **Information & Outreach Goal:** Increase hazard awareness and preparedness activity participation by area individuals, property owners, and businesses.

**Prevention Capacity Goal:** Through governmental operations, business and private sector partnerships, advance planning initiatives, voluntary and regulatory programs (e.g. code enforcement), and maintenance practices to lessen hazard impacts.

**Property Protection Goal:** Support property and infrastructure fortification programs and projects to lessen hazard impacts to lives, property, and infrastructure.

**Structural Projects Goal:** Execute measures that significantly lessen the impact of natural hazard impact to lives, communities, property, and infrastructure in the region.

**Natural System Resiliency Goal:** Preserve the function and resiliency of the region's natural resources and sensitive landscapes.

Goal	Mitigation Action Description	Hazard(s)
Information & Outreach	Develop hazard preparedness outreach/education best practices, resources, and program activity within the CVPDC website.	All Hazards
Information & Outreach	Expand outreach and education about the National Flood Insurance Program (NFIP), including inclusion within CVPDC website.	Flood
Information & Outreach	Develop public hazard communication campaign with emphasis on increasing number of residents joining area public information systems.	All Hazards
Information & Outreach	Establish regular hazard mitigation feature, where best practices for readiness, safe sheltering, public announcements, are incorporated within agency newsletter, social media feeds, and general scheduled agency outreach. Include property maintenance, business best practices - features for preparedness.	All Hazards
Capacity	Ensure the regional Hazard Mitigation Plan and mitigation planning are included as integral components of all regional planning initiatives including transportation, mobility, watershed, community development, emergency, and CEDS agency programs.	All Hazards



Goal	Mitigation Action Description	Hazard(s)
Capacity	Establish HMP Technical Advisory Committee, include locality, citizen, business, agency representation, that meets at least twice per year to review HMP mitigation strategy progress, evaluate changes, review regional projects.	All hazards
Capacity	Seek opportunities to host regional mitigation, program skills training for area locality, business and agency partner staff.	All Hazards
Capacity	Seek opportunity to expand regional Comprehensive Economic Development Strategy (CEDS) to incorporate community resiliency or develop regional resiliency plan in coordination with locality partners.	All Hazards
Capacity	Coordinate an emergency communication and verification protocol with VDOT to ensure emergency critical staff access.	All Hazards
Capacity	Evaluate and seek opportunity to execute (to include regional participation agreement and equipment purchase) regional Public Safety Answering Point (PSAP) generator(s) to facilitate rapid and efficient emergency communication and response capabilities between the region's emergency response departments.	All Hazards
Capacity	Encourage develop of local or regional Resiliency Plans	All Hazards
Capacity, Property Protection	Seek opportunities to evaluate and improve corridors, especially those with recurring stormwater impacts, essential for access to public transit or other multimodal access by vulnerable populations.	Flood
Property Protection, Structure	Seek opportunities to study condition of or improve drainage along rural roadways to reduce stormwater and flood impacts that impact roadway movement safety or impact emergency access/movement.	Flood
Property Protection, Natural System Resiliency	Support initiatives that expand use of green infrastructure in the region through education, workshops, training initiatives to expand expertise and local knowledge for green infrastructure use and implementation in area projects.	Flood, Dam
Property Protection, Structure, Natural System Resiliency	Seek opportunities to evaluate and execute streambank stabilization or other practices, to restore or protect the natural function of area streams to lessen flood impact to essential regional infrastructure (e.g. roadways, rail lines, communication towers).	Flood

#### **Implementation and Maintenance**

The success and value of the CVPDC HMP as mitigation tool and resource relies on Plan integration, monitoring, evaluation and, when necessary, amendments.

Plan adoption is essential, however, fundamental to implementation success is the structural integration of the HMP within foundational community and regional plans, regulatory systems, departmental procedures, and funding structure.

The primary tool for implementing land use goals is within each locality's zoning ordinance. The regional mitigation plan goals, objectives, and strategies should be evaluated and considered within review and zoning regulation updates, especially site improvements within flood zones.



Emergency managers should capitalize on local and regional disaster operations and recovery plans to execute elements of the Plan mitigation strategies, especially those directly applicable to emergency response operations and efficiency, including training, equipment, and facility improvement needs.

Many of the mitigation strategies, especially those property protection, structural, or natural system resiliency projects, will require considerable planning and large financial investment. Execution will require continuously seeking funding opportunities including federal and state grant programs, incorporation and duel benefits across departments and agencies to capitalize on funding efficiency, integration within capital improvement plans.

The CVPDC will be responsible for convening the CVPDC Mitigation Plan Advisory Committee (MPAC), similarly comprised of locality and agency stakeholder representatives. The CVPDC will facilitate twice-yearly MPAC meetings, where mitigation strategy implementation

including regional, locality-specific, and stakeholder summaries will be reported. The meetings will also be used to coordinate regional projects, with focus on information and outreach strategies, and incorporate a staff educational component such as information on state, federal or non-profit funding information, overview of success program execution by local partner, discussion of challenges, recordation of anticipated future changes or Plan integration, and outline agenda and actions for future meetings. Integral to the Plan maintenance program, will be the yearly submittal of a Virginia Hazard Mitigation Plan Annual Report Form to VDEM. The CVPDC Hazard Mitigation Annual Report, as well as regular program features throughout the year, will be made available for public comment and housed on the CVPDC Mitigation Plan website.

To ensure that the regional hazard plan does not exceed the FEMA five-year program eligibility an update process will be initiated, by beginning to seek FEMA funding and plan development preparation three years from the FEMA adoption.