



2026 CENTRAL SHENANDOAH HAZARD MITIGATION PLAN

EXECUTIVE SUMMARY

The Central Shenandoah Hazard Mitigation Plan (CSHMP) serves as the region's long-range plan for reducing the impact from natural and human-caused hazards. The Plan identifies vulnerabilities in communities across the region and establishes strategies to protect lives, property, infrastructure, and critical services.

On May 20, 2026, the Virginia Department of Emergency Management (VDEM) and the Federal Emergency Management Agency (FEMA) formally approved the plan, enabling participating jurisdictions to remain eligible for FEMA Hazard Mitigation Assistance grant programs upon local adoption.

The full CSHMP can be viewed online: <https://connect.cspdc.org/hazard-mitigation-plan>

PLANNING PROCESS

Originally adopted in 2005, the 2026 Plan marks the third comprehensive update and reflects the region's continued commitment to proactive hazard mitigation. The Central Shenandoah Planning District Commission (CSPDC) developed the plan over the course of two years in collaboration with 21 jurisdictions, 4 special districts, and more than 30 regional organizations. It serves as coordinated guidance for building safer communities while maintaining eligibility for federal mitigation funding. The process included:

- Comprehensive risk assessments for 8 natural hazards and 4 human-caused threats
- Evaluation of local and regional capabilities for 5 cities, 5 counties, 11 towns, and 4 special districts
- Development of regional goals and jurisdiction-specific mitigation actions
- Extensive public and stakeholder engagement, including 458 public survey responses, 4 steering committee meetings, and individual consultations with all participating entities

Notably, the region's mountainous terrain, extensive river systems, rural development patterns, karst geology, and communication restrictions under the National Radio Quiet Zone create unique resilience challenges that require coordinated regional planning. Through the planning process, flooding, wildfires, and severe winter weather emerged as the region's highest-risk hazards. Other significant threats include hazardous materials incidents, drought, sinkholes, tropical storms, and infrastructure failure.

REGIONAL MITIGATION PRIORITIES

To guide implementation, the Plan establishes six overarching regional goals supported by regional strategies and locality-specific mitigation actions. Actions include infrastructure improvements, flood mitigation projects, emergency preparedness initiatives, land use planning tools, and public education efforts. Together, these actions seek to reduce future losses and improve long-term community resilience.

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| 1 | Economic Resilience and Protection: Bolster the regional economy by reducing hazard impacts on economic sectors and critical business infrastructure. |
| 2 | Housing and Neighborhood Protection: Protect residential properties and prioritize vulnerable neighborhoods and housing populations. |
| 3 | Environmental Stewardship and Natural Hazard Mitigation: Restore and enhance natural systems' hazard mitigation functions while protecting environmental resources. |
| 4 | Resilient Public Infrastructure: Ensure high-quality, resilient infrastructure that maintains essential services before, during, and after hazard events. |
| 5 | Public Health and Safety Enhancement: Promote public health and safety by reducing hazard-related risks and ensuring effective emergency response. |
| 6 | Collaboration and Innovation: Collaborate across jurisdictions and sectors to improve resilience through innovative approaches. |

LOCAL ACTION ITEMS

In accordance with FEMA's planning requirements, participating localities and special districts developed prioritized mitigation actions and projects for each of the 12 hazards and threats based on local needs, capacity, timeline, and available funding. Implementation of these actions may occur through future capital projects, policy initiatives, infrastructure investments, and state or federal grant opportunities. A list of actions specific to the City of Harrisonburg is included in this summary.

PLAN ADOPTION & IMPLEMENTATION

Adoption of the CSHMP is required for participating jurisdictions and special districts to remain eligible for FEMA's grant programs, including funding opportunities that support flood mitigation, infrastructure hardening, emergency power systems, property protection, and other resilience projects. Upon local adoption, the CSPDC will continue to monitor the Plan annually and update it every five years in accordance with FEMA requirements. Through coordinated regional implementation, the CSHMP provides a framework for building safer and stronger communities across the Central Shenandoah region.

CITY OF HARRISONBURG LOCAL ACTIONS

The following table summarizes the mitigation actions developed for the City of Harrisonburg to address the hazards identified through the planning process. A more detailed version of the table is included in the full CSHMP and provides additional information regarding implementation timeframe, potential funding sources, and local priority rankings (i.e., High, Medium, Low).

| <i>Hazard</i> | <i>Regional Goal</i> | <i>Action</i> |
|---------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Multi-Hazard | #6 | HA-1. Continue to support the Harrisonburg-Rockingham Disaster Recovery Task Force, a volunteer group with representatives of local churches, the Red Cross, Salvation Army, United Way, VOAD, Social Services, Rockingham County, and others that work with residents affected by disasters in providing assistance not covered by federal or state recovery programs. |
| Flooding | #3 | HA-2. Maintain compliance with the National Flood Insurance Program (NFIP) by engaging in various activities included in the three basic components of the NFIP: 1) Floodplain identification and mapping risk, 2) Responsible floodplain management, 3) Flood insurance. |
| | #3 | HA-3. Consider flood mitigation actions in the City focused on natural systems protection. |
| | #3 | HA-4. Continue participation in FEMA's Cooperating Technical Program (CTP), a technical assistance program sponsored by FEMA that will assist the City in re-mapping the entire floodplain boundary in the City. |
| | #4 | HA-5. Identify and implement drainage improvement projects to mitigate flooding throughout the City. Projects may be identified through the City's Drainage Improvement Program, the Stormwater Improvement Plan, or other plans and studies. |
| | #3 | HA-6. Coordinate with the CSPDC to develop and adopt a Regional Flood Resilience Plan that identifies community flooding and stormwater needs and prioritizes projects that can be funded through DCR CFPF implementation funding. |
| | #2 | HA-7. Conduct outreach in neighborhoods outside of the Special Flood Hazard Areas (SFHA) that have previously identified flooding or flash flooding as an issue to the City. |
| | #4 | HA-8. Strengthen the City's flood monitoring capabilities by evaluating the placement and performance of existing sensors to ensure optimal coverage. Evaluate new locations for additional sensors. |

| Hazard | Regional Goal | Action |
|-----------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wildfire | #2 | HA-9. Evaluate the potential for several neighborhoods across the City to become Firewise Communities. Assist those communities as needed with achieving the certification. |
| | #3 | HA-10. Encourage the lessening of potential wildfires in the community by: 1) Education / outreach to residents, especially those living in woodland areas and WUI. 2) Reduction of hazardous fuels throughout the community. 3) Reduction of structural ignitability to limit injury, loss of life, and property damage. 4) Having trained first responders with proper tools and equipment that will serve as a frontline defense against wildfire. |
| High Winds | #5 | HA-11. Pursue opportunities to increase public education and awareness about wind-driven fires. |
| Drought | #5 | HA-12. Continue to monitor surface water levels during drought periods at all of the City's major water sources (dams/reservoirs) and advise commercial and residential users accordingly. |
| | #6 | HA-13. Assist the CSPDC with the update and adoption of the Shenandoah River Water Supply Plan as mandated by DEQ. |
| Sinkholes | #3 | HA-14. Seek opportunities to identify and increase education and awareness of karst terrain and sinkholes. |
| Extreme Temperatures | #3 | HA-15. Consider conducting a study of the Urban Heat Island (UHI) effect in the City. |
| | #2 | HA-16. Continue to direct low-income households to DSS's Energy Assistance Program (EAP), which includes Fuel Assistance, Crisis Assistance, Cooling Assistance and Weatherization Assistance. |
| Infectious Disease Outbreaks | #5 | HA-17. Continue to partner with the Central Shenandoah Health District of the Virginia Department of Health (VDH) to monitor disease outbreaks and keep residents informed. |
| Hazardous Materials Release | #5 | HA-18. Conduct regular inspections with known hazardous materials sites, maintain the City's database, and enforce compliance through the Fire Marshal's Office. |
| Utility or Infrastructure Failure | #4 | HA-19. Continue to support the electric cooperative's Black Start Initiative, a plan for a large grid failure scenario that prioritizes areas for power return. |

| <i>Hazard</i> | <i>Regional Goal</i> | <i>Action</i> |
|----------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Active Assailant | #5 | HA-20. Continue to expand and hold annual active assailant training and education through the City's existing multi-discipline program. |
| Winter Weather | #4 | HA-21. Continue to implement the City's procedures for road weatherization and maintenance during winter weather events. |