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CSHMP STEERING COMMITTEE ROSTER

Representatives from Localities		
Locality	**Name**	**Title**
City of Buena Vista	Wayne Handley	Chief of Police
	David Clements	Assistance Chief of Police
City of Harrisonburg	Paul Helmuth	Deputy Emergency Coordinator
	Jamison Ryder	Emergency Management Generalist
City of Lexington	Trent Roberts	Fire Marshall/Deputy Chief
	Arne Glaeser	Director of Planning & Development
City of Staunton	Jason Ball	Fire Chief
	Perry Weller	Deputy Fire Chief
	Brian Butler	Captain
City of Waynesboro	Gary Critzer	Director of Emergency Management
	Andrew Holloway	Fire Chief
	Leslie Tate	Director of Community Development
Augusta County	Patrick Lam	Emergency Management Coordinator
	Doug Wolfe	Director of Community Development
Bath County	Andy Seabolt	Emergency Management Coordinator
	Sherry Ryder	Planning & Zoning Administrator
	Michael Bender	County Administrator
Highland County	Harley Gardner	Emergency Manager
	Jerri Botkin	County Administrator
	Michael O'Brien	Director of Emergency Management
Rockbridge County	Nathan Ramsey	Fire Chief
	Brad Zollman	Deputy Chief
Rockingham County	Clay Shiflet	Battalion Chief
	Jeremy Holloway	Fire/Rescue Chief
Town of Bridgewater	Megan Byler	Assistant Town Manager for Public Works
	Alex Wilmer	Assistant Town Manager for Administration
	Betsy Putney	Deputy Public Works Director
Town of Broadway	Stefanie McAlister	Town Manager
	Dave Jordan	Mayor
Town of Craigsville	Harvey Sprouse	Town Council Member
	Cynthia Doyle	Town Council Member
	Corey Wood	Chief of Police
Town of Dayton	Brian Borne	Town Manager
	Justin Trout	Chief of Police
Town of Elkton	Michael King	Chief of Police
	Joshua Gooden	Mayor
Town of Glasgow	Allyson Finchum	Town Manager
	Nathan Ramsey	Fire Chief
Town of Goshen	Nathan Ramsey	Fire Chief
	Brad Zollman	Deputy Chief
Town of Grottoes	Tara Morris	Town Manager
	Rhonda Danner	Treasurer
Town of Monterey	Jay Garber	Mayor
	Robert Weiss	Council Member
Town of Mount Crawford	Libby Clark	Town Manager
	Neal Dillard	Mayor
Town of Timberville	Austin Garber	Town Manager
	Cecilia Valdez	Marketing & Events Coordinator

Representatives from Special Districts		
Special District	**Name**	**Title**
James Madison University	Hilary Cronin	Director of Risk and Emergency Management
	Ali Sloop	Stormwater Coordinator
Maury Service Authority	Jordan Combs	Executive Director
	William Johnson	Chief Engineer
Bath County Service Authority	Bart Perdue	BCSA Administrator
Augusta Water	Nick King	Safety Manager
	Hal McWhorter	Treatment Operations Superintendent

Representatives from Organizations		
Organization	**Name**	**Title**
Augusta Water	Rachel Cannon	Project Engineer
	William Monroe	Director of Engineering
Augusta Health	Scott Crabtree	VP Professional Services
	Nat Sellers	Director of Emergency Management
	Jonathan Knotts	Emergency Management Coordinator
Bath Community Hospital	Mike Miller	Director of Plant Operations
	Lori Hicks	Executive Assistant to the CEO
Bath-Highland Network Authority	Rachel Kinzer	BHNA Secretary, Regional Planner, CSPDC
	Jeremy Crute	Director of Planning, CSPDC
Bridgewater College	Milton Franklin	Chief of Police
	Ricky Biller	Interim Chief of Police
Carilion Rockbridge Community Hospital	Leonard Stewart	Emergency Management/Safety Officer
Central Shenandoah Health District, VDH	Jordan Good	Local Health Emergency Coordinator
	Corey Johnson	District Administrator
Columbia Gas of Virginia	Joe Pelletier	Field Operation Leader
	Rachael Windley	Gas Qualification Specialist
Greater Augusta Regional Chamber of Commerce	Courtney Thompson	President & CEO
Harrisonburg-Rockingham Chamber of Commerce	Christopher Quinn	President & CEO
	Sheena Armentrout	Chief of Staff & Innovation
Harrisonburg-Rockingham Community Services Board	Josh Dyke	Risk Management Specialist
	Barbara Brady	Administrative Services Director
LEX-RC-BV Chamber of Commerce	Tracy Lyons	Executive Director
Mary Baldwin University	Elaina Carson-Fuduloff	Director of Safety and Security
	Kody Lundblad	Campus Safety Supervisor
Rockbridge Area Community Services Board	Don Sherman	Director of Operations
	BreAnne Rogers	Executive Assistant
Rockbridge County Public Service Authority	Melissa Alexander	Executive Director
	Megan Tomlin	Business Manager
Shenandoah National Park, NPS	Lane Gibbons	Fire Planner
	Derek Casbon	Fire Management Officer
Shenandoah Valley Electric Corporation	Jon Sisler	Manager of Key Accounts
	Bill Rees	Director of Operations
Shenandoah Valley Partnership	Jay Langston	Executive Director
	Olivia Wright	Business Development Manager
Shenandoah Valley Regional Airport	Nelson Mace	Public Safety, Operations
	Chris Cary	Captain

Representatives from Organizations (cont.)		
Organization	**Name**	**Title**
US Forest Service	Brent Fontz	Zone Fire Management Officer
	Lauren Stull	District Ranger
Valley Community Services Board	Tammy DuBose	Director of Administrative Services
	Airiana Campbell	Quality Assurance Specialist
Virginia Department of Environmental Quality	Jennifer Hottinger	Pollution Response Coordinator
	Casey Pajarillo	Petroleum & Pollution Response Coordinator
Virginia Department of Forestry	Daniel Swisher	Forest Technician
	Darwin Rhodes	Forest Technician
Virginia Military Institute	Paul Kastner	Director of Emergency Management
	Collin Bissell	Assistance Operations and Planning Officer
Virginia Cooperative Extension – Rockingham County	Jeremy Daubert	Unit Coordinator
	Jason Copper	Horticulture Extension Agent

Administrative/Project Staff		
Organization	**Name**	**Title**
N/A (Retired)	Sharon Angle	CSHMP Steering Committee Chair
Central Shenandoah Planning District Commission	Ann Cundy	Executive Director
	Jeremy Crute	Director of Planning
	Rachel Kinzer	Regional Planner
	Elizabeth Goodloe	Regional Planner
	Philippe Bone	Regional Planner
	Steve Bolster	Senior Planner
Launch! Consulting	Linda Warren	CEO
	Brenna Young	Director of Emergency Mgmt. Programs
Virginia Department of Emergency Management	Cole Taggart	All Hazards Planner, Region 6
	Peter Homan	All Hazards Planner, Region 3
	Mike Guzo	Chief Regional Coordinator, Region 6
	Gene Stewart	Chief Regional Coordinator, Region 3
FEMA	Rodney Bahner	Region 3 Community Planner

EXAMPLE PARTICIPATION LETTER – LOCAL GOVERNMENT

CSPDC

May 9, 2024

Delivered Via Email

[redacted]
Augusta County
P.O. Box 590
Verona, VA 24482

Re: Central Shenandoah Hazard Mitigation Plan

Dear [redacted].

The Central Shenandoah Hazard Mitigation Plan (CSHMP), first created in 2005 and updated in 2013 and 2020, describes and analyzes natural hazards like winter storms, drought, hurricanes, wildfires, and floods that impact our region and offers mitigation options to reduce the impact of these natural disasters on our citizens, businesses, infrastructure, and property.

The Central Shenandoah Planning District Commission (SCPDC) will be leading a multi-jurisdictional Steering Committee to update the CSHMP beginning in the Spring of 2024. The update of the CSHMP, which will include all 21 jurisdictions in our region, will allow the opportunity to assess risk and vulnerability to natural and man-made hazards and to complete mitigation strategies to strengthen our region's communities.

The federal Disaster Mitigation Act of 2000 requires that local governments develop and adopt hazard mitigation plans in order to receive hazard mitigation grant funds in the future. In order to be eligible for future disaster funding, each local jurisdiction in our region must:

1. Appoint at least one primary and one alternate to the Steering Committee. The primary appointee or their alternate must attend all scheduled Steering Committee meetings. The first Steering Committee meeting is scheduled for Tuesday, July 16, 2024 at the Augusta Community Care Conference Rooms 1-3 (first floor) in Fishersville. Additional meetings are planned for October 2024 and March 2025.

2. Adopt the updated CSHMP once it has been "approved pending adoption" by the Federal Emergency Management Agency.

To designate the primary and alternate appointees to the Steering Committee for your jurisdiction, please complete and return the enclosed form to Steve Bolster at the CSPDC office no later than **Friday, May 31, 2024**.

If you have any questions, please contact me or Steve Bolster at (540) 885-5174.

Sincerely,

Ann W. Cundy

Ann W. Cundy
Executive Director

112 MacTanly Place, Staunton, VA 24401
Phone: (540)885.5174 | Fax: (540)885.2687 | www.cspdc.org

EXAMPLE NOMINATION FORM – LOCAL GOVERNMENT

Central Shenandoah Hazard Mitigation Plan – 2026 Update
Steering Committee

Local Jurisdiction Representative Appointment

The primary appointee or their alternate must attend scheduled Steering Committee meetings. The first meeting will be held Tuesday, July 16, 2024 - 10 AM to 12 PM at the Augusta Community Care Conference Rooms 1-3 (first floor), 64 Sports Medicine Drive in Fishersville. Additional meetings are planned for October 2024 and March 2025.

Local Jurisdiction	
Appointee:	
Name and Title of Person	
E-mail Address	
Telephone Number	
Alternate:	
Name and Title of Person	
E-mail Address	
Telephone Number	

Please Return This Form No Later Than **Friday, May 31, 2024** to:

Steve Bolster, Senior Planner
Central Shenandoah Planning District Commission
112 MacTanly Place
Staunton, VA 24401
E-mail: steve@cspdc.org
Phone: 540-885-5174 ext. 112
Fax: 540-885-2687

OUTREACH LIST – LOCAL GOVERNMENT

In an email with the participation letter and nomination form attached, CSPDC staff emailed contacts from each of the following localities to select steering committee representatives:

- Augusta County (4 contacts)
- Bath County (3 contacts)
- Highland County (2 contacts)
- Rockbridge County (4 contacts)
- Rockingham County (3 contacts)
- City of Buena Vista (4 contacts)
- City of Harrisonburg (3 contacts)
- City of Lexington (4 contacts)
- City of Staunton (4 contacts)
- City of Waynesboro (3 contacts)
- Town of Bridgewater (4 contacts)
- Town of Broadway (1 contact)
- Town of Craigsville (3 contacts)
- Town of Dayton (1 contact)
- Town of Elkton (1 contact)
- Town of Glasgow (1 contact)
- Town of Goshen (1 contact)
- Town of Grottoes (1 contact)
- Town of Monterey (1 contact)
- Town of Mount Crawford (1 contact)
- Town of Timberville (1 contact)

EXAMPLE PARTICIPATION LETTER – ORGANIZATIONS

May 16, 2024

Delivered Via Email

[redacted]
Augusta County Service Authority
18 Government Center Lane
Verona, VA 24482-2639

Re: Central Shenandoah Hazard Mitigation Plan

Dear [redacted],

The Central Shenandoah Hazard Mitigation Plan (CSHMP), first created in 2005 and updated in 2013 and 2020, describes and analyzes natural hazards like winter storms, drought, hurricanes, wildfires, and floods that impact our region and offers mitigation options to reduce the impact of these natural disasters on our citizens, businesses, infrastructure, and property.

The Central Shenandoah Planning District Commission (CSPDC) is leading a multi-jurisdictional Steering Committee to update the CSHMP beginning in the Spring of 2024. The update of the CSHMP, which will include all 21 jurisdictions in our region, will allow the opportunity to assess risk and vulnerability to natural and man-made hazards and to complete mitigation strategies to strengthen our region's communities. The federal Disaster Mitigation Act of 2000 requires that local governments develop and adopt hazard mitigation plans in order to receive hazard mitigation grant funds in the future. Once the CSHMP is approved by the Federal Emergency Management Agency, it will require adoption by each of the local governments in our region.

We encourage your organization to participate in the planning process by serving on the Steering Committee. To designate the primary and alternate appointee on the Steering Committee for your organization, please complete and email the enclosed form to Steve Bolster at steve@cspdc.org or mail it to the CSPDC office no later than **Friday, May 31, 2024.**

If you have any questions, please contact me or Steve Bolster at (540) 885-5174.

Sincerely,

Ann W. Cundy
Executive Director

Enclosure

112 MacTanly Place Staunton, VA 24401
Phone: (540)885.5174 Fax: (540)885.2687 www.cspdc.org

EXAMPLE NOMINATION FORM – ORGANIZATIONS

Central Shenandoah Hazard Mitigation Plan – 2026 Update
Steering Committee

Organization Representative Appointment

The first meeting will be held Tuesday, July 16, 2024 - 10 AM to 12 PM at the Augusta Community Care Conference Rooms 1-3 (first floor), 64 Sports Medicine Drive in Fishersville. Additional meetings are planned for October 2024 and March 2025.

Organization

Primary Appointee:

Name and Title of Person

E-mail Address

Telephone Number

Alternate Appointee:

Name and Title of Person

E-mail Address

Telephone Number

If your organization is interested in participating, please return this form no later than **Friday, June 7, 2024** to:

Steve Bolster, Senior Planner
Central Shenandoah Planning District Commission
112 MacTanly Place
Staunton, VA 24401
E-mail: steve@cspdc.org
Phone: 540-885-5174 ext. 112
Fax: 540-885-2687

OUTREACH LIST – ORGANIZATIONS

In an email with the participation letter and nomination form attached, CSPDC staff emailed contacts from each of the following organizations to select steering committee participants:

- Augusta County Service Authority/Augusta Water (Yes)
- BARC Electric Cooperative (No)
- Bath County Airport Authority (No)
- Bath County Chamber of Commerce (No)
- Bath County Service Authority (Yes)
- Bath Community Hospital (Yes)
- Bath-Highland Network Authority (Yes)
- Blue Ridge Resource Authority (Yes)
- Blue Ridge Community College (No)
- Bridgewater College (Yes)
- Carilion Rockbridge Community Hospital (Yes)
- Central Shenandoah Health District (Yes)
- Eastern Mennonite University (No)
- Greater Augusta Region Chamber of Commerce (Yes)
- Harrisonburg-Rockingham Chamber of Commerce (Yes)
- Harrisonburg-Rockingham Regional Sewer Authority (No)
- Highland County Chamber of Commerce (No)
- James Madison University (Yes)
- Lake Shenandoah Stormwater Central Authority (No)
- LEX-RC-BV Chamber of Commerce (Yes)
- Mary Baldwin University (Yes)
- Maury Service Authority (Yes)
- Natural Bridge State Park (No)
- Rockbridge Area Network Authority (Yes)
- Rockbridge County Public Service Authority (Yes)
- Rockbridge Area Community Services (Yes)
- Shenandoah Valley Partnership (Yes)
- Shenandoah Valley Regional Airport (Yes)
- Southern Virginia University (No)
- US National Park Service Shenandoah National Park (Yes)
- Virginia Cooperative Extension (Yes)
- Virginia Department of Environmental Quality (Yes)
- Virginia Department of Forestry (Yes)
- Virginia Military Institute (Yes)
- Washington and Lee University (No)
- Western State Hospital (No)

OUTREACH LIST – ORGANIZATIONS (cont.)

CSPDC staff also mailed invitations to the following organizations:

- American National University (No)
- Augusta Health (Yes)
- Cherry Orchard Homeowners Association (No)
- Columbia Gas of Virginia (Yes)
- Dominion Energy (No)
- Harrisonburg Electric Commission (No)
- Harrisonburg-Rockingham Community Services Board (Yes)
- Holtzman Corporation (No)
- Quarles Petroleum (No)
- Santara RMH Medical Center (No)
- Shenandoah Valley Electric Cooperative (Yes)
- Southern Sates – Augusta Petroleum Cooperative (No)
- US Forest Service (Yes)
- USDA Natural Resource Conservation Service (No)
- Valley Community Services Board (Yes)
- Wilson Workforce and Rehabilitation Center (No)

Central Shenandoah Hazard Mitigation Plan (CSHMP)
Steering Committee Meeting
Augusta Community Care (conference rooms 1-3 on first floor)
64 Sports Medicine Drive in Fishersville
Tuesday, July 16, 2024
10 AM – 12 PM

Agenda

10:00 AM **Welcome, Introductions, and HMP Overview** (*Steve Bolster, CSPDC Senior Planner*)

- What is the HMP?
- Why the HMP matters
- Detail HMP update process and timeline
- Steering Committee role

10:20 AM **Targeting VDEM & FEMA Approval** *(Jeremy Crute, CSPDC Director of Planning & Steve)*

- Key components of the HMP
- Plan Review Guide: Standard Elements
- Review FEMA feedback on approved 2020 HMP

10:40 AM **Break**

10:50 AM **Regional Hazard Identification & Prioritization** (*Linda Warren, Launch! Consulting CEO*)

- Jurisdictional impacts and vulnerabilities activity & discussion
- Hazard & threat prioritization voting

11:55 AM **Closing and Adjournment** (*Steve*)

- Input for October 2024 and March 2025 meeting dates
- What's Next?

Central Shenandoah Valley Hazard Mitigation Plan

2024-2025 Steering Committee Members

Administrative

Central Shenandoah Planning District Commission (CSPDC)

Virginia Department of Emergency Management (VDEM)

Local Government

City of Buena Vista
City of Harrisonburg
City of Lexington
City of Staunton
City of Waynesboro
County of Augusta
County of Bath
County of Highland
County of Rockbridge
County of Rockingham
Town of Bridgewater
Town of Broadway
Town of Craigsville
Town of Dayton
Town of Elkton
Town of Glasgow
Town of Goshen
Town of Grottoes
Town of Monterey
Town of Mount Crawford
Town of Timberville

Other Organizations or Government Agencies

Augusta County Service Authority
Augusta Health
Blue Ridge Resource Authority
Bridgewater College
Carilion Rockbridge Community Hospital
Central Shenandoah Health District (Virginia Department of Health)
Columbia Gas
Greater Augusta Regional Chamber of Commerce
Harrisonburg-Rockingham Chamber of Commerce
Harrisonburg-Rockingham Community Services Board
James Madison University
Mary Baldwin University
Maury Service Authority
Rockbridge Area Network Authority
Rockbridge County Public Service Authority
Rockbridge Area Community Services Board
Shenandoah National Park (National Park Service)
Shenandoah Valley Electric Co-Op
Shenandoah Valley Partnership
Shenandoah Valley Regional Airport
Valley Community Services Board
Virginia Department of Environmental Quality
Virginia Department of Forestry
Virginia Military Institute

Administrative Contact Information

Central Shenandoah Planning District Commission

Jeremy Crute, Director of Planning: jeremy@cspdc.org or 540-885-5174 ext. 114
Steve Bolster, Senior Planner: steve@cspdc.org or 540-885-5174 ext. 112
Philippe Bone, Regional Planner: philippe@cspdc.org or 540-885-5174 ext. 108
Rachel Kinzer, Regional Planner: rachel@cspdc.org or 540-885-5174 ext. 113

Virginia Department of Emergency Management

Peter Homan, All Hazards Planner (R3): Peter.Homan@vdem.virginia.gov or 804-912-6860
Cole Taggert, All Hazards Planner (R6): Cole.Taggart@vdem.virginia.gov or 804-998-0249

Planned Activity

CSPDC is working with Launch! Consulting to complete the Threat and Hazard Identification and Risk Assessment (THIRA) portion of the CSHMP update. Launch! Consulting CEO Linda Warren will provide a review of the 32 threats and hazards, and applicable definitions, followed by an activity to determine the primary threats and hazards to focus on in the THIRA. The activity will include:

- Step One: elaboration on threat/hazard impacts. Sixteen large charts, each with two threats/hazards and matching definitions, will be available for members to write their known jurisdictional impacts and vulnerabilities from personal experience. Members will be in small groups.
- Step Two: Group discussion on identified threats/hazards.
- Step Three: Voting. Each member will receive 10 stickers to place on their top 10 threats/hazards after the discussion portion. At least 12 threats/hazards, those with the most stickers, are the areas to be analyzed as part of the THIRA.

Attachments

CSPDC 2026 Hazard Mitigation Plan THIRA Threats, Hazards, and Definitions List
FEMA Fact Sheet: Local Hazard Mitigation Planning

Hyperlinks to Regional Plans

CSHMP:
CSHMP_2020_Final_Appendix_K_MSA_2024-05-20.pdf (cspdc.org)
Regional Wildfire Protection Plan:
Central-Shenandoah-Regional-Wildfire-Protection-Plan-compressed.pdf (cspdc.org)

Availability for Future Steering Committee Meeting Dates

Please select all dates that you might be available to attend future Steering Committee meetings*. One meeting will be held in October 2024 and the other in March 2025. The meeting dates will be announced soon.

October 2024:

Wednesday, October 9th, 10 AM - 12 PM _____
Wednesday, October 16th, 10 AM - 12 PM _____
Wednesday, October 23rd, 10 AM - 12 PM _____

March 2025:

Wednesday, March 12th, 10 AM - 12 PM _____
Wednesday, March 19th, 10 AM - 12 PM _____
Wednesday, March 26th, 10 AM - 12 PM _____

*Please bring the completed page to the meeting or email Steve (steve@cspdc.org) with your selections. Thank you.

CSPDC	CSPDC 2026 Hazard Mitigation Plan THIRA Threats and Hazards		
Number	**Category**	**Threat/Hazard**	**Threat Description**
1	Natural Hazard	Flooding	An overflow of water onto normally dry land caused by rising water in an existing waterway, such as a river, stream, or drainage ditch; may also be caused by excessive rainfall
2	Natural Hazard	Tropical storm/Hurricane	A tropical cyclone with a sustained surface wind of at least 39 miles per hour
3	Natural Hazard	Drought	A deficiency in precipitation and/or unusually hot weather that is significant enough to cause a serious water shortage; a drought event can last weeks, months, or even years
4	Natural Hazard	High winds	Sustained winds (not gusts) greater than 40 mph or gusts of 58 mph or greater; not associated with a tropical storm or hurricane
5	Natural Hazard	Tornado	A mobile, destructive vortex of violently rotating winds having the appearance of a funnel-shaped cloud and advancing beneath a large storm system
6	Natural Hazard	Hail and Ice	A form of precipitation consisting of solid ice that forms inside thunderstorm updrafts; an accumulation of ice which creates slippery surfaces
7	Natural Hazard	Snow and Blizzard	A significant accumulation of snow (4" or greater) which may or may not have associated sustained high winds of 35 mph or greater
8	Natural Hazard	Lightning	A short occurrence of a visible electrical discharge between a cloud and the ground
9	Natural Hazard	Extreme Temperatures	A measure of temperature variations above (extreme heat) or below (extreme cold) normal conditions
10	Natural Hazard	Earthquake	A sudden slipping or movement of a part of the earth's crust accompanied and followed by a series of vibrations
11	Natural Hazard	Landslide/Mudslide	Masses of rock, earth, or debris move down a slope
12	Natural Hazard	Sinkhole	Destabilization or movement of land that results from accumulation of water in subsurface area or gradual erosion
13	Natural Hazard	Wildfire	An unplanned fire that burns in a wilderness area
14	Natural Hazard	Infectious Disease Outbreak	A biological disease outbreak in excess of normal expectancy; includes epidemics and pandemics
15	Natural Hazard	Space Weather	The variations in the space environment between the sun and earth which can have negative impacts to power and communications infrastructure
16	Technological Hazard	Structural Fire	A fire which occurs in a residential, commercial, or community-based building or infrastructure
17	Technological Hazard	Transportation Accident (Air, Maritime, Rail)	Large-scale, unintentional incident involving air, maritime, or railway vehicles resulting in a collision with vegetation, structure, or another apparatus
18	Technological Hazard	Hazardous Materials Release	Unintentional leak, spillage, discharge, or release of hazardous (chemical, biological, or radiological) materials which pose a threat to human health and safety and the surrounding environment
19	Technological Hazard	Utility Outage (power, gas, water)	Large-scale utility outage/interruptions in the form of electricity, gas, or water as a result of unintentional technical or mechanical issue (infrastructure mishap, equipment failure, etc.)

CSPDC	CSPDC 2026 Hazard Mitigation Plan THIRA Threats and Hazards		
Number	**Category**	**Threat/Hazard**	**Threat Description**
20	Technological Hazard	Telecommunication Outage	Large-scale telephone interruption or outage, either copper or fiber, as a result of unintentional technical or mechanical issue (infrastructure mishap, equipment failure, etc.)
21	Technological Hazard	Network Outage	Large-scale loss of network connectivity as a result of unintentional technical or mechanical issue (infrastructure mishap, equipment failure, etc.); it can affect a user's ability to access websites or online services, and can impact businesses relying on network connectivity
22	Technological Hazard	Critical Infrastructure Failure	The loss of physical systems (e.g., hospital HVAC system or dam failure) that a community or organization uses to provide critical and/or life safety services
23	Malevolent Threat	Terrorism: Physical Attack	Physical violence by a non-nation state group with the intent to intimidate or cause significant fear, injury, or death to multiple people
24	Malevolent Threat	Terrorism: CBRN Attack	Use of chemical, biological, radiological and nuclear (CBRN) materials by a non-nation state group with the intent to intimidate or cause significant fear, injury, or death to multiple people
25	Malevolent Threat	Active Assailant	A physical assault, by one or more individuals, with the intent of inflicting serious harm and/or deadly force on others (e.g., active shooter) in a confined and/or populated area
26	Malevolent Threat	Bomb Threat	A threat communicated through telephone, mail, e-mail, or other modes of communication, with the intent or false intent to kill and/or intimidate any individual or destroy property by means of an explosive
27	Malevolent Threat	Intentional Explosion	A threat where an explosive (e.g., conventional or improvised explosive device) is intentionally used with the intent to kill, harm, incapacitate, harass, distract people, or destroy property
28	Malevolent Threat	Civil Unrest	An incident having three or more persons who disrupt the community and require intervention to maintain public safety; this can be displayed in various forms: riots, demonstrations, threatening individuals, or assemblies that have become disruptive
29	Malevolent Threat	Critical Infrastructure Sabotage	An incident where harm is caused by intentionally damaging, disabling, or destroying equipment or infrastructure
30	Malevolent Threat	Vehicle Ramming Attack	The intentional use of a vehicle as a weapon to attack individuals or property (e.g., crowds of people, buildings, other vehicles, etc.)
31	Malevolent Threat	Cyber-attack Against Data	A malicious attack on data management, information system, and/or operational systems that may disable, disrupt, prevent use of, or steal data from affected systems, including personal, financial, and other sensitive data and other economic consequences
32	Malevolent Threat	Cyber-attack Against Infrastructure	A direct malicious attack on the physical systems (e.g., servers) that a community or organization uses to work effectively

Hazard Mitigation Planning for Local Governments

This fact sheet provides an overview of mitigation planning for local governments.

Natural hazards can cause loss of life and damage property and infrastructure. These events can also harm a community's economic, social and environmental well-being. Hazard mitigation lessens the impacts of natural hazards by taking actions before the next event. Hazard mitigation plans raise awareness of hazards, risks and vulnerabilities. They also identify ways to reduce risk and focus local resources on the greatest risks. At the same time, they communicate local priorities to state and federal officials.

The Local Mitigation Planning Process

The mitigation planning process encourages local governments, including special districts, to work mitigation into other planning processes. Examples of these may include land use, housing, transportation, economic development, floodplain management and others. Mitigation planning has four steps:

1. **Identify the Planning Team and Organize Resources:** Gather the resources you will need for a successful mitigation planning process. Reach out to technical experts. Define the planning area. Find partners, such as non-profits, to join the planning process. The 2022 Local Mitigation Planning Policy Guide explains this process.
2. **Assess Risks:** Identify each hazard's characteristics and potential effects. Find where the hazard may occur. Which people, properties or assets may be in harm's way? It is wise to speak with representatives from sectors that support diverse communities within the planning area. It is also a good idea to talk with people representing community lifelines, such as water and power infrastructure.
3. **Develop a Mitigation Strategy:** Set goals and long-term strategies to avoid or lessen the effects of natural hazards. Local governments should base their strategy on an assessment of their regulatory, administrative and financial capabilities that can support risk reduction.
4. **Adopt and Implement the Plan:** Bring the plan to life by adopting it and carrying out the mitigation actions in the strategy.

Benefits of Hazard Mitigation for Local Governments

Mitigation is an investment in future safety and sustainability. Mitigation planning helps you act now, before a disaster, to reduce losses. Mitigation plans are also a prerequisite for some kinds of non-emergency disaster assistance. Mitigation planning can:

- Increase public safety and prevent loss of life and injury.

- Reduce damage to existing and future development.
- Prevent harm to economic, cultural and environmental assets.
- Reduce downtime, speed up recovery and lower response costs.
- Meet other community objectives. These include capital improvements, infrastructure protection, open space preservation and economic resilience.

Mitigation Actions for Risk Reduction

Mitigation actions can reduce losses from natural hazards. The four types of mitigation actions are:

- **Plans and Regulations:** Set policies or codes that guide the way government authorities develop land and build structures.
- **Structure and Infrastructure Projects:** Update existing buildings and infrastructure or build to higher standards.
- **Education and Awareness Programs:** Teach visitors, residents, and elected officials about hazards and ways to reduce risks.
- **Natural Systems Protection:** Minimize damage and losses while saving or restoring the functions of natural systems.

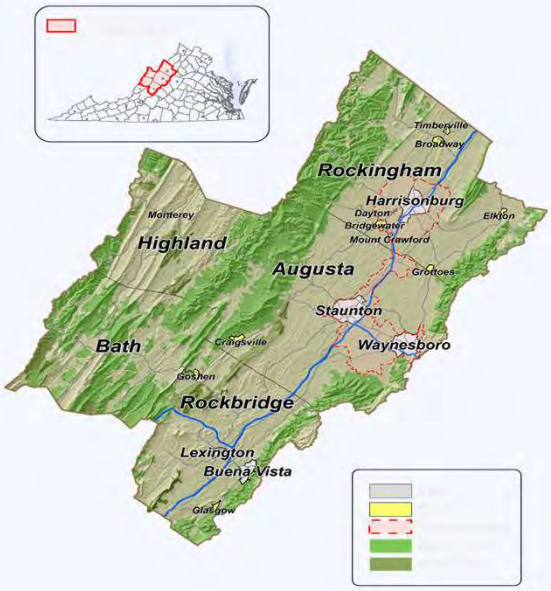
Mitigation Plan Implementation and Monitoring

Communities can act by completing mitigation projects and adding mitigation to other plans and programs. Monitoring how the plan is carried out makes sure it stays relevant as priorities and development patterns change. A local government must update its hazard mitigation plan every 5 years.

FEMA has several guides, tools and resources to help communities create hazard mitigation plans.

- Hazard mitigation planning regulations and guidance direct the development of state, local, tribal and territorial hazard mitigation plans.
- The Local Mitigation Planning Policy Guide is an official document local governments can use to develop, update and carry out their plans. It includes tools and examples. The Local Mitigation Planning Handbook is also a useful reference.
- Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards gives example mitigation actions based on hazard type.
- Create a Hazard Mitigation Plan has planning resources and information on virtual and in-person trainings.

CSHMP Update
Steering Committee Meeting #1
July 16, 2024



Celebrating 55 Years
CSPDC
Central Shenandoah Planning District Commission

1

Agenda

- Introductions
- HMP Overview
- Targeting VDEM & FEMA Approval
- Regional Hazard ID & Prioritization
- Future Meeting Dates
- What's Next?
- Summary



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Introductions

- Name
- Organization
- Organizational role
- Have you served on a CSHMP Steering Committee previously?



3

HMP Overview

- What is the HMP?
- Why the HMP Matters
- HMP update process & timeline
- Steering Committee role



4

HMP Overview

Hazards/Threats

- Cause loss of life
- Damage buildings and Infrastructure
- Have devastating consequences for a community's economic, social, and environmental well-being.



5

What is Hazard Mitigation?

Hazard Mitigation

- Any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event. Mitigation is also known as prevention, encourages long-term reduction of hazard vulnerability. The goal of mitigation is to save lives and reduce property damage.



6

What is Hazard Mitigation?

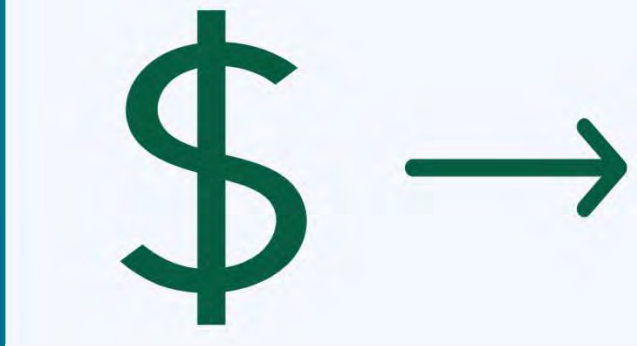


A HMP is not:

- Emergency Response Plan
- Continuity of Operations Plan
- Dust collector

7

Why the HMP Matters



To save lives and property

8

HMP Process & Timeline

Project Kickoff
- Steering Committee Meeting – July 2025

Threat & Hazard Risk Assessment
- THIRA Completed by Launch – Nov. 2024

Strategy Development
- To include meetings with each locality

Plan Finalization and Adoption
- Submit to FEMA – Oct. 1, 2025
- Adopted by Localities – May 1, 2026

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Targeting VDEM & FEMA Approval

- Key components of the HMP
- Plan Review Guide: Standard Elements
- Review FEMA Feedback from 2020 CSHMP



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10

Regional Hazard ID & Prioritization

- Jurisdictional impacts and vulnerabilities activity & discussion
- Hazard & threat prioritization voting

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Regional Hazard ID & Prioritization

- Jurisdictional impacts and vulnerabilities activity
  - Please write your personal experience and insight statement on the applicable hazard or threat
  - Examples:
    - Hurricane causes downtown flooding - cut off road access, including fire station.
    - Heat wave leads to power outages/deaths

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Regional Hazard ID & Prioritization

- Hazard & threat prioritization voting
  - Each member received 12 dot labels when you signed in this morning
  - Use these labels to vote on your top hazards & threats
  - Up to three individual votes (labels) may be used on any one of the hazards & threats

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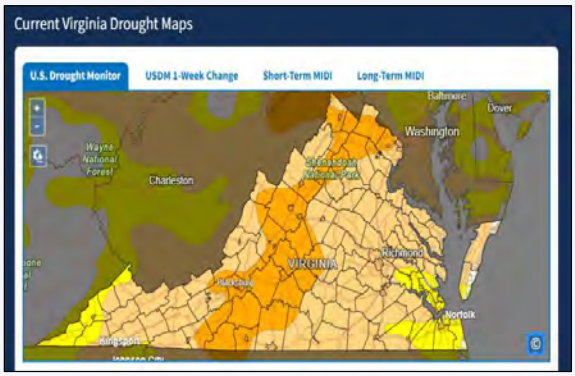
Future Meeting Dates

- Please complete availability survey (handout - p. 4)
  - October 2024
    - Wednesday, October 9th, 10 AM - 12 PM
    - Wednesday, October 16th, 10 AM - 12 PM
    - Wednesday, October 23rd, 10 AM - 12 PM
  - March 2025
    - Wednesday, March 12th, 10 AM - 12 PM
    - Wednesday, March 19th, 10 AM - 12 PM
    - Wednesday, March 26th, 10 AM - 12 PM

14

What's Next?

- Prioritized threats & hazards are THIRA focus
- CSPDC will email ~Top 10 threats & hazards to Cmte
- Homework - please provide feedback on ranking



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Summary

- Introductions
- HMP Overview
- Targeting VDEM & FEMA Approval
- Regional Hazard ID & Prioritization
- Future Meeting Dates
- What's Next?



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Questions?

Jeremy Crute
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Rachel Kinzer
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rachel@cspdc.org
(540) 885-5174 x 113

17

Questions?

Linda Warren, P.E.
CEO and Founder
linda@launch-consulting.com
(434) 481-1845

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Thank you for your involvement!

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Central Shenandoah Planning District Commission

SIGN-IN SHEET

CSHMP Steering Committee Meeting #1

July 16, 2024 at 10 AM

Augusta Community Care Conference Rooms 1-3 (first floor), 64 Sports Medicine Drive in Fishersville

NAME	AFFILIATION	EMAIL	PHONE
Jordan Keyser	~~Keysorjm@ci.staunton.va.us~~ Staunton Fire Rescue	Keysorjm@ci.staunton.va.us	540-457-1242
Patrick Lam	Augusta Co.	Plam@Co.Augusta.VA.US	540-4803939
Rachael Windley	Columbia Gas of Virginia	rwindley@nisource.com	540-280-1029
Joe Pelletier	Columbia Gas of VA	AJPELLETIER@NISOURCE.COM	540-809-7758
Nat Sellers	Augusta Health	NLSELLERS@AUGUSTAHEALTH.com	540-332-5028
Daniel Swisher	VA Dept. of Forestry	daniel.swisher@dof.virginia.gov	804-346-6124
Nick King	Augusta Water	nking@augustawater.com	540.487-4613
Hal Mawhorter	Augusta Water	hmawhorter@augustawater.com	(540) 487-4156
Steve Bolster	CSPDC	steve@cspdc.org	(540) 885-5174
Hayley Cronin	JMU	CRONINHA@JMU.EDU	540-568-7683
Milton Franklin	Bridgewater College	mfranklin@bridgewater.edu	540-828-5761

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Central Shenandoah Planning District Commission

SIGN-IN SHEET

CSHMP Steering Committee Meeting #1

July 16, 2024 at 10 AM

Augusta Community Care Conference Rooms 1-3 (first floor), 64 Sports Medicine Drive in Fishersville

NAME	AFFILIATION	EMAIL	PHONE
Paul Helmick	Harrisonburg	paul.helmick@harrisonburgva.gov	540-476-0860
Jamison Ryder	Harrisonburg	Jamison.ryder@harrisonburgvagov	540 217 8838
Derek Casbon	Shen. N.P.	derek_casbon@nps.gov	540-999-3500 x3441
Jon Sisler	SVEC	Jsisler@SVEC.coop	540-323-0117
Sharon Angle	Staunton/CSPDC	ladystaunton@verizon.net	540-480-4566
WAYNE HANDLEY	Buena Vista POLICE	wayne.handley@BVCITY.org	757 708 8342
BILL Rees	SVEC	brees@SVEC.coop	540 478 3042
Alex Wilmer	Town of Bridgewater	amwilmer@bridgewater.va	540-908-4210
Jason Ball	Staunton Fire	balljc@ci.staunton.va.us	540-810-4942
Harley Gardner	Highland Co.	hgrdnr@yahoo.com	540-292-0456
Jay Garber	Mill Terey	jaygarber306@gmail	540_903-1424

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SIGN-IN SHEET

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NAME	AFFILIATION	EMAIL	PHONE
Cynthia Doyle	Town of Craigsville	doyle001@verizon.net	540-414-1998
Harvey Sprouse	" " "	Harvey.sprouse@yahoo.com	540-997-9158
BRIAN J. BORNE	TOWN OF DAYTON	bborne@daytonva.us	540-830-1802
Mike King	Town of Elkton	mking@townofelkton.com	540-298-9441
Jordan Good	Central Shenandoah Health Dist	~~pjord~~ jordan.good@vdh.virginia.gov	540-290-4100
Rob Wen	Town of Monterey	robwe.ss246yahoo	845-742-3676
Casey Pajarillo	DEQ	cassandra.pajarillo@deq.virginia.gov	540-209-8962
P T Kastner	VMI	kastnerpt@vmi.edu	540 784 6197
BreAnne Rogers	Rockbridge Area CSB	brogers@racsb.org	540-463-3141
Megan Tomlin	Rockbridge County PSA	mtomlin@rockbridgecountyva.gov	540-463-4329
Jonathan Knotts	Augusta Health	jeknotts@augustahealth.com	540 255 6710

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NAME	AFFILIATION	EMAIL	PHONE
Melissa Alexander	Rockbridge County PSA	malexander@rockbridgecounty.va.gov	540 463 4529
Scott Crabtree	Augusta Health	scrabtree@augustahealth.com	540 332 5837
Tara Morris	Town of Grottoes	tmorris@ci.grottoes.va.us	540-249-5939
Courtney Thompson	GARCC	courtneyC@augustaarc.com	(540) 324-1134
Amy Carter	Waynesboro	acarter@ci.waynesboro.va.us	540 942 1229
Stefanie McAlister	Broadway	smcalister@broadwayva.gov	
LEONARD STEWART	Rockbridge Comm. Hospital	lstewart1@carilionclinic.org	540-458-3530
Jeremy Crute	Central Shenandoah PDC	jeremy.crute@gmail.com	[illegible]
Philippe Bar	CSPDC	philippe@cspdc.org	540-885-5174
Rachel Kinzer	CSPDC	rachel@cspdc.org	540-885-5174 x113

CSPDC
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SIGN-IN SHEET

CSHMP Steering Committee Meeting #1

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NAME	AFFILIATION	EMAIL	PHONE
Jennifer Hottinger	DEQ	jennifer.hottinger@deq.virginia.gov	804-652-5812
Brent Holtz	U.S. Forest Service	brent.holtz@usda.gov	540 685 3506
Neal Dillard	Mt. Crawford	neal.dillard@verizon.net	703 314 9351
Joshua Dyke	Harrisonburg-Rockingham CSB	jdyke@hrcsb.org	540-438-7146
Linda Warren	Launch! Consulting	Linda@Launch-consulting.com	434-422-2670

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SIGN-IN SHEET

CSHMP Steering Committee Meeting #1

July 16, 2024 at 10 AM

Augusta Community Care Conference Rooms 1-3 (first floor), 64 Sports Medicine Drive in Fishersville

NAME	AFFILIATION	EMAIL	PHONE
CHRIS CAMY	SHD AIRPORT	CCAMY@FLYSHD.COM	540-453-0199
Olivia Wright	SVP	owright@thegreenandvalley.com	540 394 8001
Austin Garber	Town of Timberville	townmanager@townoftimberville.com (540) 896-7058	Via Zoom
Kevin Moore	Rockbridge County	kmoore@rockbridgecountyva.gov (540) 572-4213	Via Zoom
Sherry Ryder	Bath County	sherry.ryder@bathcountyva.gov (540) 839-7236	Via Zoom

Threat #	Threat	Area Votes						Total Votes
		Rockingham	Augusta	Rockbridge	Highland	Bath	Regional	
1	Flooding	10	17	7	3	1	15	53
19	Utility Outage	6	9	3	3	1	14	36
3	Drought	11	8	2	4	0	9	34
22	Critical Infrastructure Failure **	7	9	3	0	0	14	33
32	Cyber-attack Against Infrastructure **	10	6	2	0	0	12	30
14	Infectious Disease Outbreak	7	10	3	0	0	7	27
25	Active Assailant	11	8	1	1	0	6	27
20	Telecommunication Outage *	7	6	3	0	1	10	27
17	Transportation Incident	5	5	5	1	0	10	26
21	Network Outage *	6	3	2	1	1	13	26
13	Wildfire	3	5	1	4	0	12	25
4	High Winds	3	5	2	3	1	10	24
29	Critical Infrastructure Sabotage **	4	9	3	0	0	7	23
9	Extreme Temperatures	7	6	1	0	1	8	23
18	Hazardous Materials Release	3	4	4	1	0	8	20
7	Snow and Blizzard	2	3	1	5	1	2	14
2	Tropical Storm/Hurricane	1	3	2	1	1	4	12
23	Terrorism: Physical Attack	2	6	0	0	0	4	12
28	Civil Unrest	4	5	1	0	0	2	12
31	Cyber-attack Against Data	4	3	1	0	0	4	12
16	Structural Fire	0	3	0	2	1	3	9
12	Sinkhole	1	4	0	0	0	3	8
26	Bomb Threat	1	2	0	0	0	1	4
6	Hail and Ice	0	2	0	0	0	1	3
8	Lightning	2	0	0	0	0	1	3
11	Landslide/Mudslide	0	0	0	1	1	1	3
5	Tornado	1	0	1	0	0	0	2
15	Space Weather	0	1	0	0	0	1	2
24	Terrorism: CBRN Attack	0	0	0	0	0	2	2
27	Intentional Explosion	0	0	0	0	0	2	2
10	Earthquake	0	0	0	0	0	1	1
30	Vehicle Ramming Attack	0	1	0	0	0	0	1
*33	Loss of supply	0	1	0	0	N/A	0	1
*33	Miscommunications and misinformation - social media	0	0	0	0	N/A	0	0
*33	Over reliance on I-81/I-64	0	0	0	0	N/A	0	0
*33	Climate change	0	0	0	0	N/A	0	0
*33	Invasive species	0	0	0	0	N/A	0	0

Rachel Kinzer

From: Steve Bolster <steve@cspdc.org>
Sent: Friday, August 02, 2024 2:08 PM
To: Steve Bolster
Cc: Jeremy Crute; Philippe Bone; Rachel Kinzer
Subject: CSHMP Sterring Committee update
Attachments: Impact-Mitigation-Survey-2024-08-02-Final.docx

Importance: High

Follow Up Flag: Follow up
Due By: Wednesday, August 21, 2024 9:00 AM
Flag Status: Flagged

Good afternoon, CSHMP Steering Committee:

Thank you for your continued participation on the CSHMP Steering Committee. We had a great turnout for our first meeting on July 16th. We appreciate the inputs you all provided over the course of the meeting. Below are some CSHMP updates for your review and action.

Upcoming Steering Committee Meetings

Based on the availability survey Steering Committee members completed, the following dates received the most votes. We have reserved the Brite Transit Facility for these meeting dates and times. The meeting location is at 51 Ivy Ridge Lane, Fishersville, VA 22939. The conference room is on the first floor. Parking is available in front and on the right side of the building. We'll send out a meeting invitation soon. In the interim, please update your calendars with this information. Thank you.

- Wednesday, October 23, 2024, 10 AM - 12 PM
- Wednesday, March 12, 2025, 10 AM - 12 PM

Final List of Threats/Hazards

At the July meeting, the Steering Committee members voted to select the top threats/hazards to our region to guide our analysis moving forward. The list below shows these identified threats/hazards. For those who attended, you will notice two differences between the list below and the 14 threats/hazards identified at the meeting. First, we combined Telecommunication Outage and Network Outage into one threat. Second, we increased the number of threat/hazards from 14 to 15. These changes allowed Snow and Blizzard and Tropical Storm/Hurricane to be included.

- Flooding (#1)
- Drought (#3)
- Wildfire (#10)
- High Winds (#12)
- Extreme Temperatures (#13)
- Snow & Blizzard (#15)
- Tropical Storm & Hurricane (#16)
- Infectious Disease Outbreak (#7)

- Transportation Incident #(9)
- Utility Outage (#2)
- Telecommunications & Network Outage (combined #8 & #11)
- Critical Infrastructure Failure (#4)
- Cyberattack Against Infrastructure (#5)
- HazMat Release (#14)
- Active Assailant (#6)

Survey Link to Rank Threat/Hazard Impact (Action Requested)

Below is a survey link for Steering Committee members to provide input on the degree to which the identified 15 threats/hazards impact your individual communities. The survey also asks for your feedback on your community's mitigation preparedness. Attached is a document that explains the criteria to use for the survey. Please complete the survey no later than Wednesday, August 23rd at 5 PM. Thank you.

https://www.surveymonkey.com/r/CSPDC-HMP

CSPDC Project Management Changes

CSPDC recently modified staff responsibilities. As a result, Regional Planner Rachel Kinzer will now be the CSPDC lead on managing the CSHMP update project. Her contact information is rachel@cspdc.org and (540) 688-3042. The remainder of the Community and Economic Development Team (Jeremy Crute, Philippe Bone & I) will continue to assist with this project.

Please contact me or Rachel if you have any questions. Have a great Friday afternoon and enjoy your weekend!

Regards.
Steve

Steve Bolster, CGFM, VCA
Senior Planner
Central Shenandoah Planning District Commission
112 MacTanly Place, Staunton, VA 24401
(540) 885-5174 ext. 112 I **steve@cspdc.org**
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CSPDC
Central Shenandoah Planning District Commission

Important Disclaimer: *The information conveyed in this communication is intended for the use of the original addressee(s), and may be legally privileged, confidential, and/or exempt from disclosure under applicable law. If this communication was not addressed or copied to you, then you have received it in error and are strictly prohibited from reading, copying, distributing, disseminating, or transmitting any of the information it conveys. If you received this*

Central Shenandoah Hazard Evaluation Survey

This survey is designed to gather jurisdiction-specific information regarding the threats and hazards that were identified during the July 16, 2024 Steering Committee meeting. The data that is pulled into this survey should be fact-based and specific to your jurisdiction, not the full planning region.

Survey results will be tallied and averaged for the purpose of the Threat and Hazard Identification Risk Assessment (THIRA), while also keeping individual jurisdiction answers available for future planning needs. Results will be made available to the jurisdictions as well as included in the 2025 Hazard Mitigation Plan.

The established criteria for each column of the following questions are defined in the attached pages to guide your decision-making process.

If you have questions, please contact Rachel Kinzer (Rachel@CSPDC.org).

1. Name:

2. What locality or organization do you represent?

THREAT & HAZARD IMPACTS

3. Please rank each of the following threats/hazards between 0-3 based upon the known impacts to your community. (Use the criteria document attached to the email for reference).

	Human Impact	Property Impact	Business Impact
Flooding			
Drought			
Wildfire			
High Winds			
Extreme Temperatures			
Snow & Blizzard			
Tropical Storm & Hurricane			
Infectious Disease Outbreak			
Transportation Incident			
Utility Outage			
Telecommunications & Network Outage			
Critical Infrastructure Failure			
Cyberattack Against Infrastructure			
HazMat Release			
Active Assailant			

MITIGATION MEASURES

4. Please rank each of the following threats/hazards between 0-3 based upon the existing mitigation measures in place for your community. (Use the criteria document attached to the email for reference).

	Preparedness (Pre-Planning Efforts)	Response Capabilities	Likelihood of Consequences Given Existing Mitigation Efforts
Flooding			
Drought			
Wildfire			
High Winds			
Extreme Temperatures			
Snow & Blizzard			
Tropical Storm & Hurricane			
Infectious Disease Outbreak			
Transportation Incident			
Utility Outage			
Telecommunications & Network Outage			
Critical Infrastructure Failure			
Cyberattack Against Infrastructure			
HazMat Release			
Active Assailant			

Impact Ranking Criteria

Use the following criteria to rank human, property, and business impact (columns 2-4 in the main table):

Impact Rankings	
Ranking	**Criteria**
Human Impacts	
0	Deaths are very unlikely, injuries are unlikely
1	Deaths are unlikely, injuries are minimal
2	Deaths are possible, injuries may be substantial
3	Deaths are probable, injuries will be substantial
Property Impacts	
0	Damage is minimal; homes are still inhabitable
1	Damage is moderate; fewer than 10 homes are uninhabitable
2	Damage is moderate; fewer than 40 homes are uninhabitable
3	Damage is severe; whole neighborhoods are uninhabitable
Business Impacts	
0	Interruptions are less than 6 hours
1	Interruptions are less than 24 hours
2	Interruptions are expected to last between 24 to 48 hours
3	Interruptions are expected to last more than 48 hours

Mitigation Ranking Criteria

Use the following criteria to rank preparedness capabilities, response capabilities, and existing mitigation. When considering existing mitigation measures, do NOT include those that have been planned for/budgeted – only those that are actively implemented in your jurisdiction.

Mitigation Rankings	
Ranking	**Criteria**
Preparedness (Pre-Planning Efforts)	
0	Well-prepared, detailed planning, fully trained staff
1	Prepared, documented processes, partially trained staff
2	Unprepared, some processes documented, minimal staff trained
3	Significantly unprepared, inadequate process documentation, staff untrained
Response Capabilities	
0	Timely response, effective resources, adequate staffing
1	Timely response, minimum required resources, minimum staffing
2	Delayed response, some additional resources needed, minimal staffing available
3	Significantly delayed response, inadequate resourcing, insufficient staffing
Existing Mitigation	
0	No potential consequences or minimal consequences are anticipated
1	Consequences are somewhat probable based on previous occurrences and losses
2	Consequences are moderately probable based on previous occurrences and losses
3	Consequences are highly likely based on previous occurrences and losses

CSPDC Risk Calculations

Facilitated by Launch! Consulting

CSPDC Risk Calcuations

Event	PROBABILITY RANKING	SEVERITY = (IMPACT - MITGATION)						RISK
		HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPAREDNESS	RESPONSE CAPABILITIES	EXISTING MITIGATION	
	Likelihood This will Occur	Possibility of Death or Injury	Physical Losses and Damages	Interruption of Services	Preplanning Efforts	Timeliness, Effectiveness of Resources	Consequence Likelihood w/ Existing Mitigation	* Relative threat
SCORE	0 = Unlikely 1 = Occassional 2 = Likely 3 = Highly Likely	0 = Unlikely 1 = Low 2 = Moderate 3 = High	0 = Minimal 1 = Low 2 = Moderate 3 = Severe	0 = < 6 hours 1 = < 24 hours 2 = 24-48 hours 3 = 48+ hours	0 = Well Prepared 1 = Prepared 2 = Unprepared 3 = Significantly Unprepared	0 = Timely Response, Effective Resourcing 1 = Timely Response, Minimal Resourcing 2 = Delayed Response, Addtl Resources Needed 3 = Significantly Delayed, Inadequate Resourcing	0 = Minimal 1 = Somewhat Probable 2 = Moderately Probable 3 = Highly Likely	0 - 100%
Flooding	3	2	2	2	1	1	1	48%
Drought	2	0	0	3	1	1	1	31%
Wildfire	2	2	2	2	1	1	1	47%
High Winds	1	1	2	1	1	1	1	35%
Extreme Temperatures	3	2	0	0	1	1	1	27%
Tropical Storm/Hurricane	1	1	1	2	1	1	1	35%
Snow and Blizzard	2	2	1	2	1	1	1	41%
Infectious Disease Outbreak	1	3	0	3	2	1	2	56%
Transportation Incident	2	2	0	1	1	1	1	31%
Utility Outage (power, gas, water)	3	1	0	1	1	1	1	27%
Telecommunications/Network Outage	2	0	0	2	2	2	1	36%
Critical Infrastructure Failure	1	2	0	3	2	2	2	56%
HazMat Release	2	2	1	2	1	1	1	41%
Cyber-Attack Against Infrastructure	2	0	0	3	2	2	1	41%
Active Assailant	0	2	0	1	1	1	1	30%

Central Shenandoah Hazard Mitigation Plan
Steering Committee Meeting (Hybrid)
Wednesday, October 23, 2024
10:00 AM – 11:30 AM

Join via Zoom	Join in-person
Zoom Link Meeting ID: 833 2012 3088 Passcode: 010384	Brite Transit Facility 51 Ivy Ridge Lane, Fishersville, VA 22939

Agenda

10:00 AM **Welcome and Introduction**
- HMP Update Overview

10:15 AM **Public Input Survey Update**
- Survey Overview
- Preliminary Results

10:30 AM **THIRA Presentation** *(Brenna Young, Launch Consulting)*
- Draft Threat & Hazard Identification and Risk Assessment (THIRA)
- THIRA Q&A

11:05 AM **Break**

11:10 AM **Community Assets & Critical Facilities**
- FEMA Guidelines
- Current Inventory & Update Process

11:30 AM **Closing and Adjournment**
- Next Steps

Central Shenandoah Hazard Mitigation Plan
2024-2025 Steering Committee Members

Administrative

Central Shenandoah Planning District Commission (CSPDC)
Virginia Department of Emergency Management (VDEM)

Local Government	Other Organizations or Government Agencies
City of Buena Vista	Augusta County Service Authority
City of Harrisonburg	Augusta Health
City of Lexington	Blue Ridge Resource Authority
City of Staunton	Bridgewater College
City of Waynesboro	Carilion Rockbridge Community Hospital
County of Augusta	Central Shenandoah Health District (VDH)
County of Bath	Columbia Gas
County of Highland	Greater Augusta Regional Chamber of Commerce
County of Rockbridge	Harrisonburg-Rockingham Chamber of Commerce
County of Rockingham	Harrisonburg-Rockingham Community Services Board
Town of Bridgewater	James Madison University
Town of Broadway	Mary Baldwin University
Town of Craigsville	Maury Service Authority
Town of Dayton	Rockbridge Area Network Authority
Town of Elkton	Rockbridge County Public Service Authority
Town of Glasgow	Rockbridge Area Community Services Board
Town of Goshen	Shenandoah National Park (National Park Service)
Town of Grottoes	Shenandoah Valley Electric Co-Op
Town of Monterey	Shenandoah Valley Partnership
Town of Mount Crawford	Shenandoah Valley Regional Airport
Town of Timberville	Valley Community Services Board
	Virginia Cooperative Extension (Rockingham Office)
	Virginia Department of Environmental Quality
	Virginia Department of Forestry
	Virginia Military Institute

Central Shenandoah Hazard Mitigation Plan

Steering Committee Meeting
October 23, 2024



1

Agenda

I. HMP Update Process

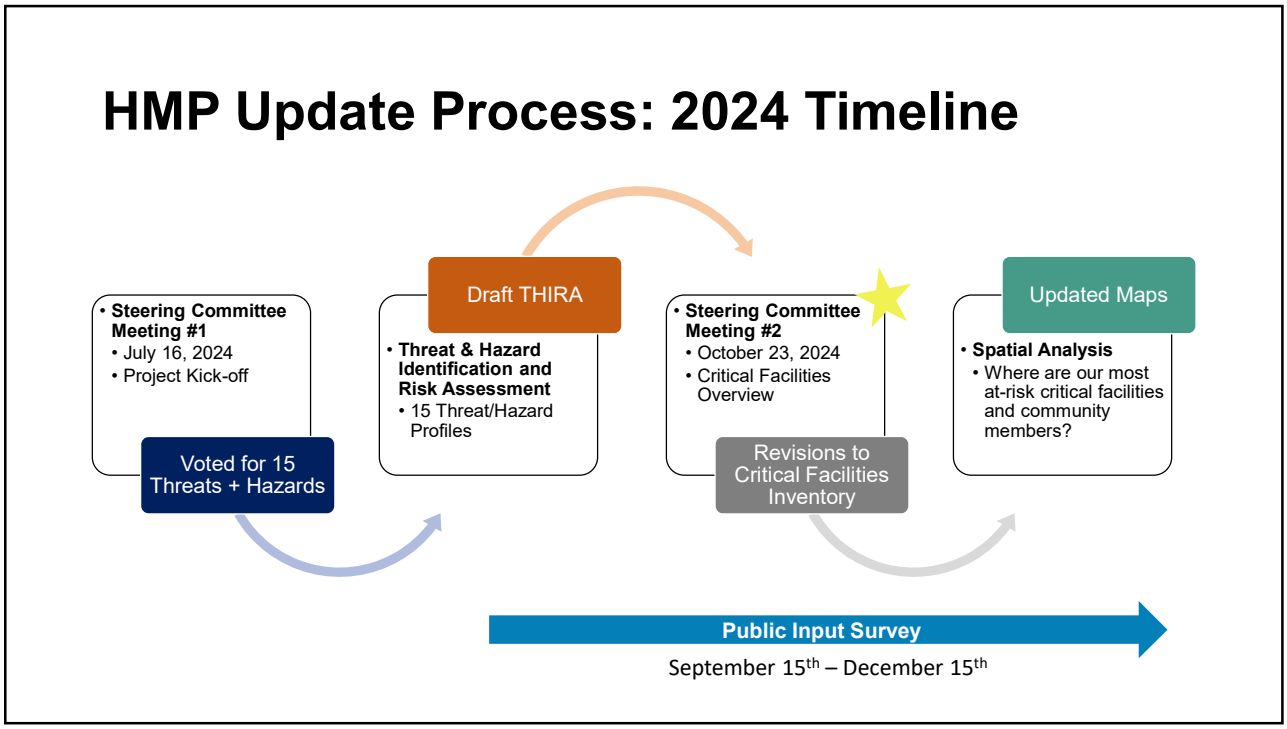
II. Threat & Hazard Identification and Risk Assessment (THIRA) Presentation

III. Critical Facilities

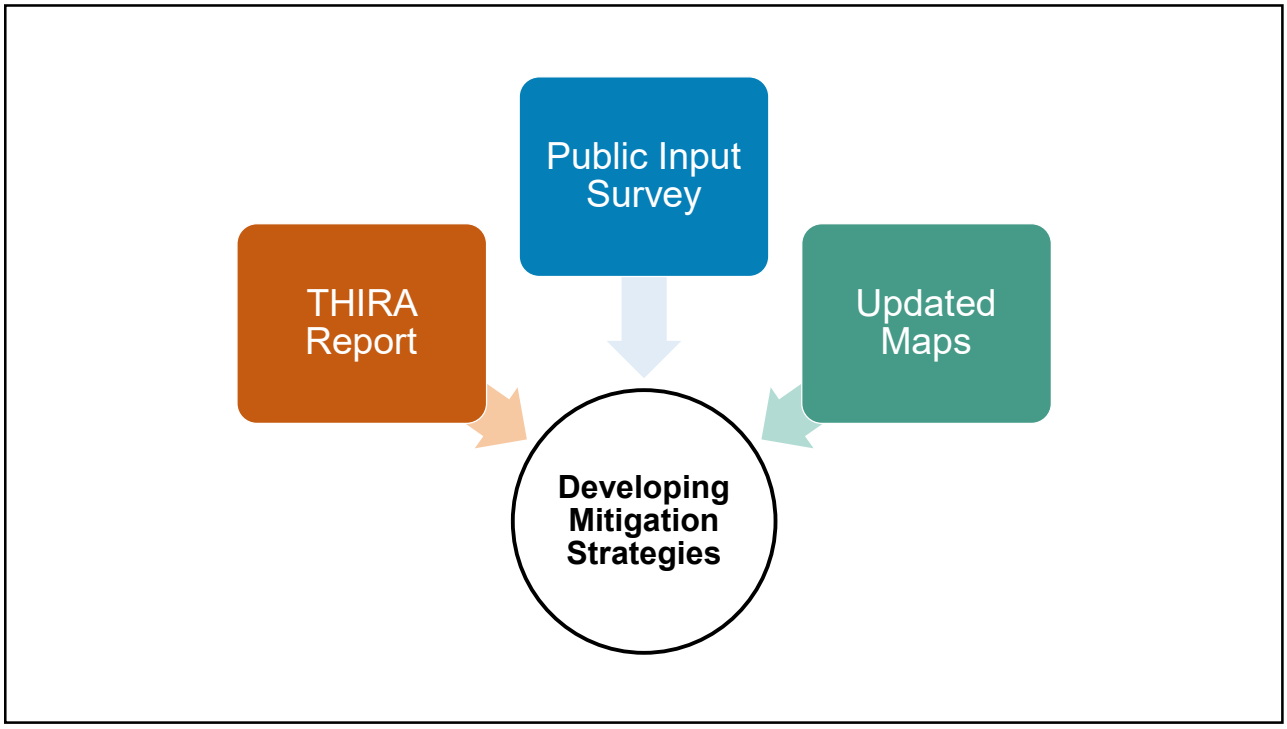
IV. Next Steps



2


HMP Update Process: 2024 Timeline
• Steering Committee Meeting #1
• July 16, 2024
• Project Kick-off
Voted for 15 Threats + Hazards
Draft THIRA
• Threat & Hazard Identification and Risk Assessment
• 15 Threat/Hazard Profiles
• Steering Committee Meeting #2
• October 23, 2024
• Critical Facilities Overview
Revisions to Critical Facilities Inventory
Updated Maps
• Spatial Analysis
• Where are our most at-risk critical facilities and community members?
Public Input Survey
September 15th – December 15th

3


Public Input Survey
THIRA Report
Updated Maps
Developing Mitigation Strategies

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Tentative Timeline for 2025

Developing Mitigation Strategies
- Locality-specific meetings & capability assessments

Initial Strategy Identification

Regional Themes & Strategies

Steering Committee Meeting #3
- March 12, 2025

Refining Mitigation Strategies
- Meetings with each locality to refine strategies

Final Draft of Strategies

Review of Draft Plan

Draft Hazard Mitigation Plan
- Draft plan open for review by Steering Committee and Public

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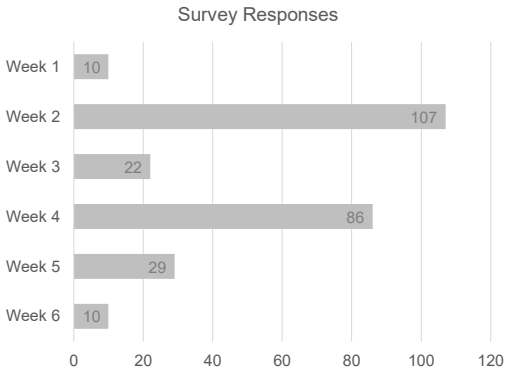
Public Input Survey

Total Responses: 263





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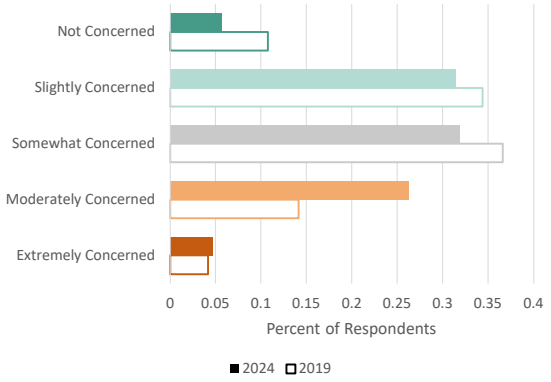
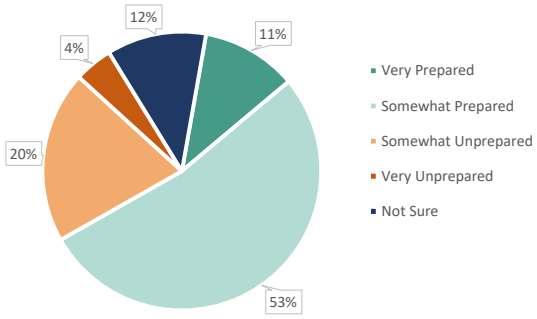
Preliminary Results

Q11: How concerned are you about a natural hazard occurring at your place of residence?



Q8: How well-prepared do you believe your community is to effectively respond to a disaster?



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Critical Facilities

FEMA defines critical facilities as:

"specific assets of the built environment that provide services that are essential for life, safety, and economic viability."

1,153 Critical Facilities Identified in 2019

(If Locality) Receive List of Existing Critical Facilities by October 25th

Update List or **Create List** (for Non-Localities) Given FEMA Guidelines

Return List to CSPDC by **November 15th**

CSPDC will Clean the Updated Data Set and Prepare Maps

10

Suggested Types of Critical Facilities


Community Lifelines (FEMA)



Historic/ Cultural Assets


Economic Assets


Schools


Vulnerable Populations


Seasons + Events

11

FEMA Community Lifelines



12

Next Steps

I. Incorporate Feedback and Finalize THIRA

II. Update Critical Facilities Inventory

III. Starting Focused Discussions on Mitigation Strategies

IV. 3rd Steering Committee Meeting: March 12, 2025

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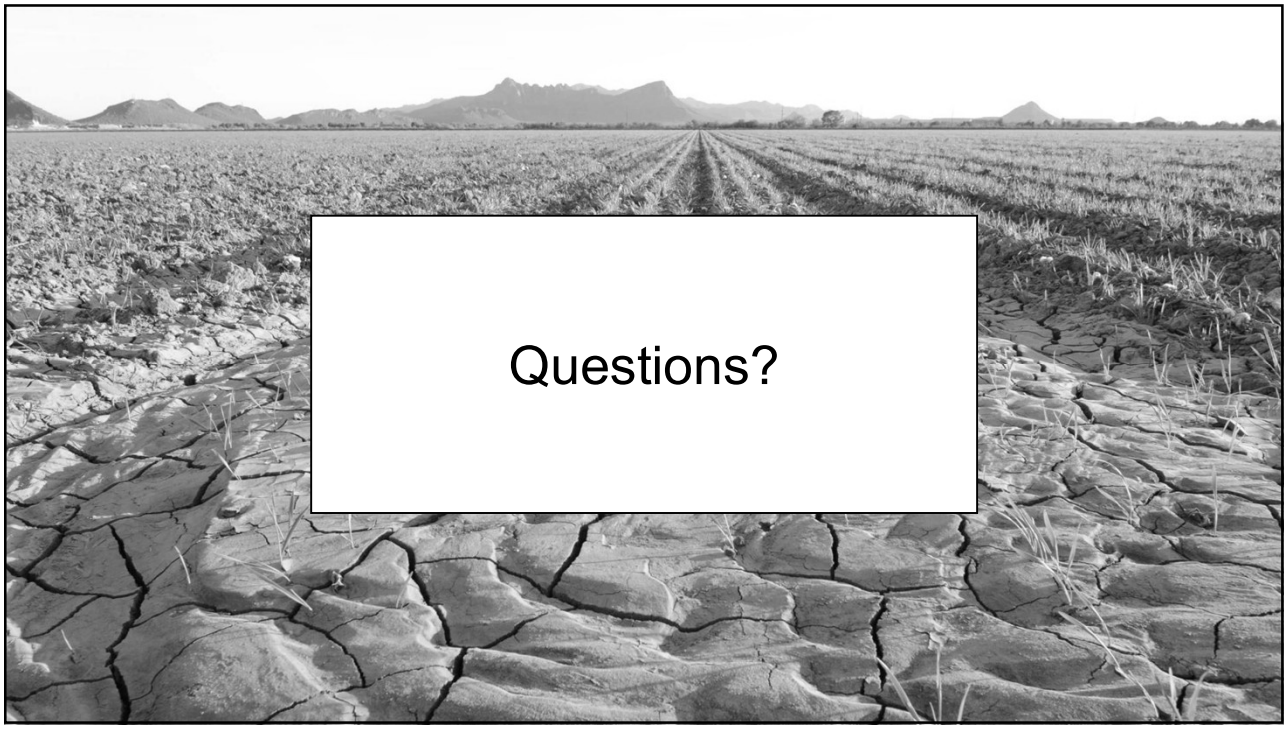


14


Celebrating
55
Years
CSPDC
Central Shenandoah Planning District Commission
Thank You!

15

Celebrating 55 Years

CSPDC

Central Shenandoah Planning District Commission

SIGN-IN SHEET

CSHMP Steering Committee Meeting #2

October 23, 2024 at 10 AM

NAME	AFFILIATION	EMAIL	PHONE
Nick King	Augusta Water	nking@augustawater.com	(540) 487-4613
Cynthia Doyle	Craigsville	doyle4d1@verizon.net	540-414-1998
Patrick Lam	Augusta County EM	Plam@Co.Augusta.VA.US	540 480 3939
Jennifer Hottinger	DEQ	jennifer.hottinger@deq.virginia.gov	804-462-5812
Cole A. Taggart	VDEM	cole.taggart@vdem.virginia.gov	804-998-0249
Joshua Dyke	HRCSB	jdyke@hrcsb.org	540-830-2266
Courtney Thompson	GARCC	courtney@augustaia.com	(540) 324-1134
Olivia Wright	SVP	owright@theshenandoahvalley.com	540 394 8801

Celebrating 55 Years

CSPDC

Central Shenandoah Planning District Commission

SIGN-IN SHEET

CSHMP Steering Committee Meeting #2

October 23, 2024 at 10 AM

NAME	AFFILIATION	EMAIL	PHONE
Mike King	Elkton Police	MKing@townofelkton.com	540-298-9441
Harley Gardner	Highland Co.	hgrdnr@yahoo.com	540-292-0456
Doug Wolfe	Augusta Co	dwolfe@co.augusta.va.us	540 245 5700
L. Jordan Combs	Mary Service Authority	J.Combs@MSAuthority.org	540-784-8036
Shannon Angle	City of Staunton/PDC	ladystaunton@verizon.net	540-480-4566
BRIAN J. BORNE	TOWN OF DAYTON	bborne@daytonva.us	540.879.2241

Hybrid - Zoom Attendees

Celebrating 55 Years

CSPDC

Central Shenandoah Planning District Commission

SIGN-IN SHEET

CSHMP Steering Committee Meeting #2

October 23, 2024 at 10 AM

NAME	AFFILIATION	EMAIL	PHONE
Clay Shiflet	Rockingham County		
Lexington Emergency Management			
Brenna Young	Launch Consultant		
Ali Sloop	JMU		
Austin Gerber	Timberville		
Bill Rees	Shenandoah Valley Electric Corporation		
BreAnne Rogers	Rockbridge Area Community Services Board		
Chris Quinn	HR Chamber of Commerce		
Don Sherman	RACS		
J. Ryder	City of Harrisonburg		
Jason Ball	City of Staunton		

Zoom attendees

Celebrating 55 Years

CSPDC

Central Shenandoah Planning District Commission

SIGN-IN SHEET

CSHMP Steering Committee Meeting #2

October 23, 2024 at 10 AM

NAME	AFFILIATION	EMAIL	PHONE
Jon M. Sisler	Shenandoah Valley Electric Corporation		
Jordan Combs	Maury Service Authority		
Paul Kastner	Virginia Military Institute		
Perry Weller	City of Staunton		
R. Darner	Grottoes		
T. Morris	Grottoes		
16614483794			
Daniel Swisher	VDOF		
Tracy Lyons	LEX-RC-BV Chamber of Commerce		
Paul Helmuth	Harrisonburg		
Rodney Bahner	FEMA		

Zoom attendees

Celebrating 55 Years

CSPDC

Central Shenandoah Planning District Commission

SIGN-IN SHEET

CSHMP Steering Committee Meeting #2

October 23, 2024 at 10 AM

NAME	AFFILIATION	EMAIL	PHONE
Kmoore	Rockbridge County		
Cole Taggart	VDEM		
Igibbons	Shenandoah National Park (NPS)		
Alex Wilmes	Bridgewater		
Brent Foltz	US Forest Service		
Rachel Wirdley	Strarity VA? Columbia Gas of VA		
Lori Hicks	Bath Community Hospital		
15402260243			
Anne Glesner	Lexington		

CRITICAL FACILITIES – LOCAL GOVERNMENT EMAIL EXAMPLE

Rachel Kinzer

From: Rachel Kinzer <rachel@cspdc.org>
Sent: Friday, October 25, 2024 1:41 PM
To: [redacted]@glasgowvirginia.org; [redacted]@rockbridgecountyva.gov; [redacted]@rockbridgecountyva.gov
Subject: Critical Facilities - Rockbridge, Glasgow, Goshen - CSHMP update
Attachments: Rockbridge-Glasgow-Goshen-Critical-Facilities-10.25.2024.xlsx; FEMA-Community-Lifelines.pdf

Importance: High

Hello—

As CSHMP steering committee representatives for Rockbridge County, the Town of Glasgow, and the Town of Goshen, I am reaching out to you to provide feedback on our existing list of critical facilities.

Please see the attached Excel workbook with our existing data for Rockbridge, Glasgow, and Goshen. The CSPDC asks that you review the spreadsheets, make any edits or comments, and return the workbook to us by **November 30th.** I have also attached a FEMA community lifelines infographic for your reference.

The CSPDC will send out a reminder/follow-up email in a few weeks. We greatly appreciate your time and help updating this data set for the Hazard Mitigation Plan update. Please let us know if you have any questions.

Thank you,

Rachel

Rachel Kinzer
Regional Planner
Central Shenandoah Planning District Commission
112 MacTanly Place
Staunton, VA 24401
540-885-5174 x113 | www.cspdc.org

CRITICAL FACILITIES – ORGANIZATIONS EMAIL EXAMPLE

Rachel Kinzer

From: Rachel Kinzer <rachel@cspdc.org>
Sent: Thursday, October 31, 2024 10:27 AM
To: [redacted]@vdh.virginia.gov; [redacted]@vdh.virginia.gov; [redacted]@nisource.com; [redacted]@nisource.com; [redacted]@nps.gov; [redacted]@nps.gov; [redacted]@svec.coop; [redacted]@svec.coop; [redacted]@theshenandoahvalley.com; [redacted]@theshenandoahvalley.com; [redacted]@flyshd.com; [redacted]@flyshd.com; [redacted]@usda.gov; [redacted]@usda.gov; [redacted]@vcsb.org [redacted]@deq.virginia.gov; [redacted]@deq.virginia.gov; [redacted]@dof.virginia.gov; [redacted]@dof.virginia.gov
Subject: Critical Facilities (RE: CSHMP Steering Committee Meeting #2 (Hybrid))
Attachments: New-Critical-Facilities-Blank-Spreadsheet-10.31.2024.xlsx

Good morning,

I apologize for the delay on sending out a critical facilities spreadsheet. Because you all are CSHMP steering committee representatives for organizations/entities that cross locality boundaries, you are receiving a more generalized Excel workbook.

Please see the attached excel workbook; it has instructions and blank sheets to add critical facilities as you see fit. If you would like to see the list of existing facilities for a specific locality in our region, then I would be happy to send it to you upon request.

It is completely optional to fill out this workbook. If easier, you can email us a list of critical facilities you would like to ensure are included in our update. CSPDC staff will cross reference all spreadsheets to check for double-counting and/or missing entries.

We ask steering committee representatives to return the workbook and/or email us a list of critical facilities by **November 30th**. I will send out a reminder email in the next few weeks as well.

Please let us know if you have any questions. We appreciate your time and assistance with this update.

Thank you,

Rachel

Rachel Kinzer
Regional Planner
Central Shenandoah Planning District Commission
112 MacTanly Place
Staunton, VA 24401
540-885-5174 x113 | www.cspdc.org

CRITICAL FACILITIES – BLANK WORKBOOK EXAMPLE

2024 Critical Facilities Update

The CSPDC asks steering committee representatives to help review and update our existing inventory of critical facilities.
Please return the edited workbook and/or general feedback to the CSPDC by **November 30, 2024.**

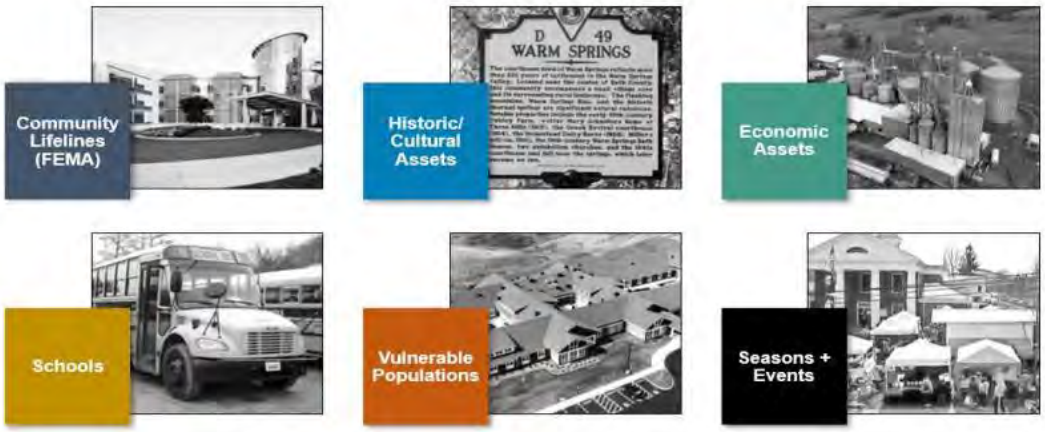
Critical Facility Spreadsheet
Please add critical facilities to the list as you see fit. If you are unsure, you can add a note under the 'Comment' field. **If you add a critical facility, please complete the 'Name', 'Address', and 'Type' fields.** You do not have to worry about the other fields, as the CSPDC will update those.

Seasons + Events Spreadsheet
This is a new category suggested by FEMA. It is intended to help identify any major events that generate significant economic activity for an area (e.g., farming seasons, major festivals).

If you do not have any edits for the spreadsheet, please email us that you have finished reviewing the spreadsheet.
Contact Rachel Kinzer (rachel@cspdc.org; (540) 688-3042) or Jeremy Crute (jeremy@cspdc.org) if you have any questions.

FEMA's Definition of Critical Facilities
Critical faciliites are "specific assets of the built environment that provide services that are essential for life, safety, and economic viability."

Suggested Types of Critical Facilities (the 'Category' Field in spreadsheet)



NAME	ADDRESS	LOCALITY	TYPE	Comments

Central Shenandoah Hazard Mitigation Plan (CSHMP)
Steering Committee Meeting

Augusta Community Care Conference Rooms
64 Sports Medicine Drive, Fishersville, VA 22939

Monday, March 10, 2025
9:30 AM – 12:00 PM

Agenda

9:30 AM **Welcome and CSHMP Update** *(CSPDC)*

9:50 AM **Hazard Mitigation Workshop** *(FEMA, VDEM)*

- Introductions
- Role of the Hazard Mitigation Plan
- Project Identification
- Project Application Do's and Don'ts
- Technical Assistance
- Next Steps

11:50 AM **Closing and Adjournment**

Central Shenandoah Hazard Mitigation Plan

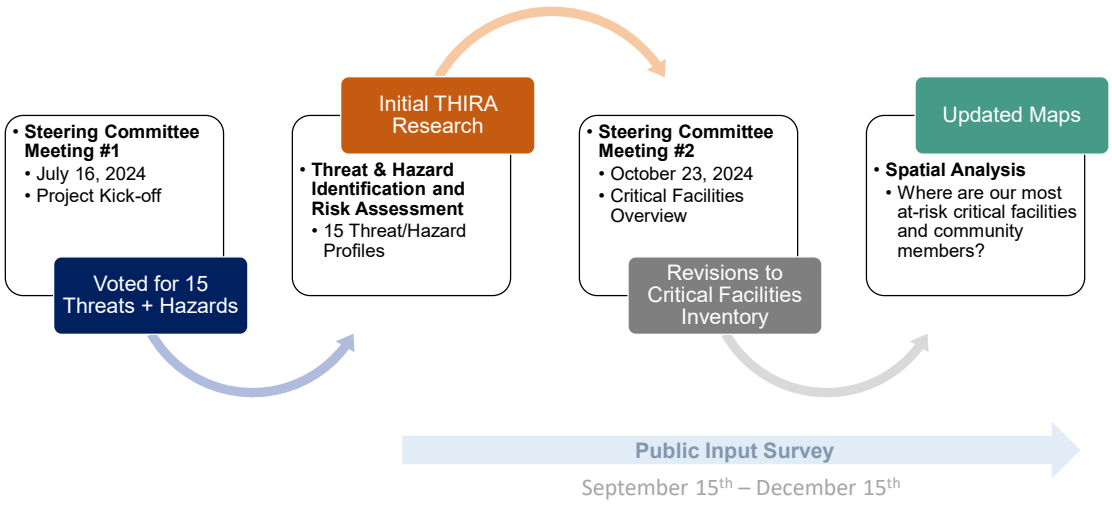
Steering Committee Meeting

March 10, 2025



1

CSHMP Update Process



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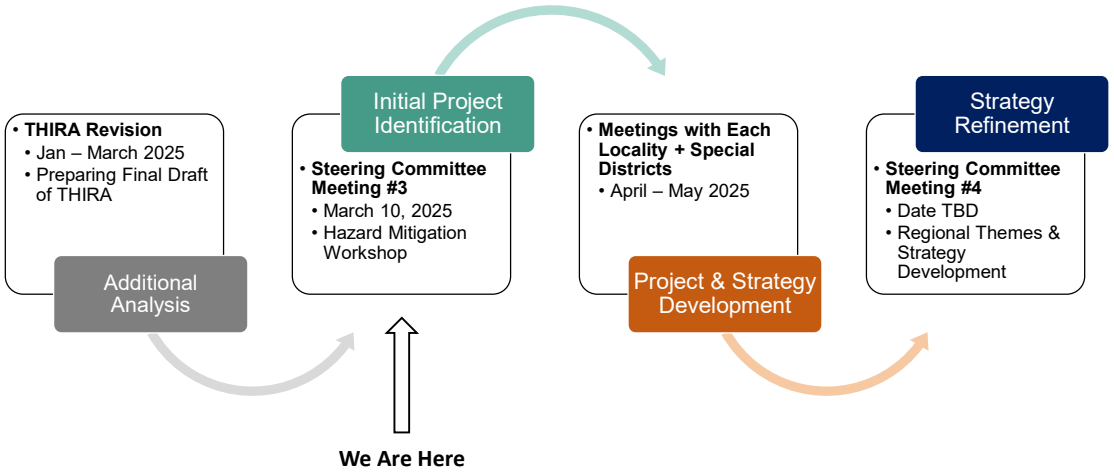
CSHMP Update Process



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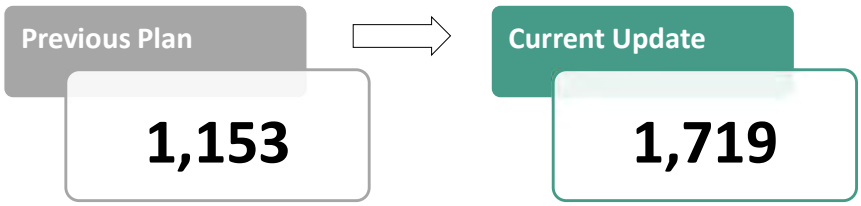
Critical Facilities & Community Assets

- Updated Critical Facilities Spreadsheets
  - Sorted the facilities into 10 categories
  - Generated coordinates to do additional spatial analysis



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Critical Facilities & Community Assets

Category	Examples	Total Number Identified
Emergency & Medical	Emergency Response, Fire & Rescue Stations, Police Departments, Medical Facilities, Hospitals	138
Public Service	Local & State Government Offices, Libraries, Schools	220
Water Systems	Public Works, Water & Wastewater Treatment Plants, Water Pump Stations, Water Tanks, Publicly-owned Wells	155
Utility	Power Stations, Fuel Stations, Cell Towers, Emergency Generators, Solar	214
Industrial	Industrial Sites, Public Waste Disposal, Quarries, Lumber Yards	184

5

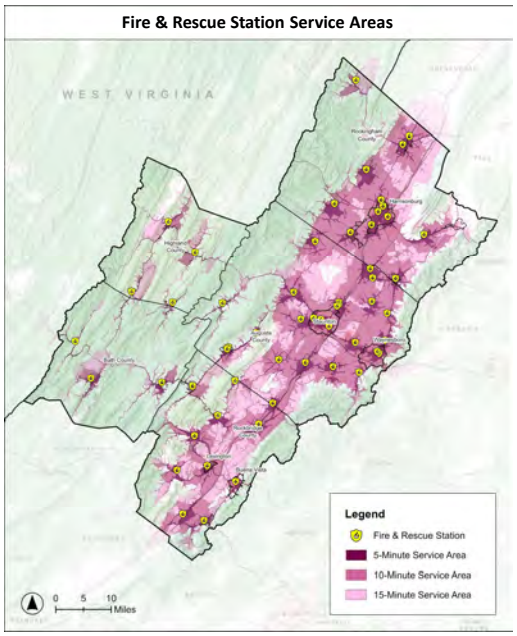
Critical Facilities & Community Assets

Category	Examples	Total Number Identified
Transportation	Major Railroad and Airports	7
Major Employers	SVP's List of Leading Employers	64
Historic Places	Sites on the National Register of Historic Places	272
Social Centers	Community Centers, Child Daycare, Social Service, Churches	394
Special Populations	Senior/Assisted Living, Correctional Facilities, Subsidized Housing	71

6

Spatial Analysis

- Identified the Critical Facilities in:
  - 100-Year Floodplain
  - 500-Year Floodplain
  - Dam Inundation Areas
  - Wildland-Urban Interface
  - 100ft of a Potential Sinkhole
- 5, 10, 15-minute Service Areas around Fire & Rescue Stations
- Concentrations of Repetitive Loss Structures, Sinkholes



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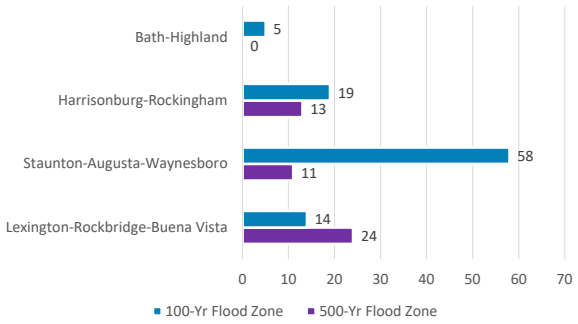
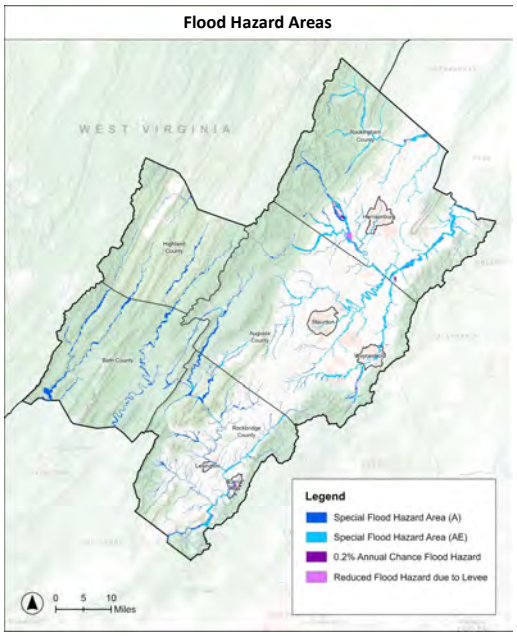
Example: Flooding

- Identified the Critical Facilities in:
  - 100-Year Floodplain
  - 500-Year Floodplain





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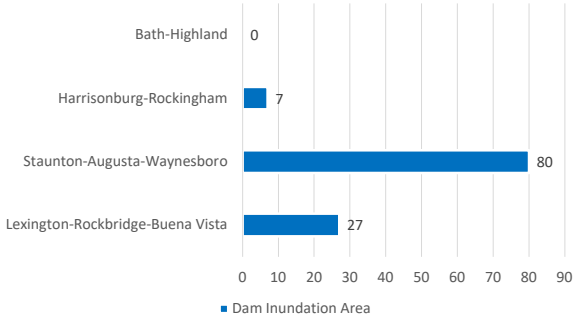
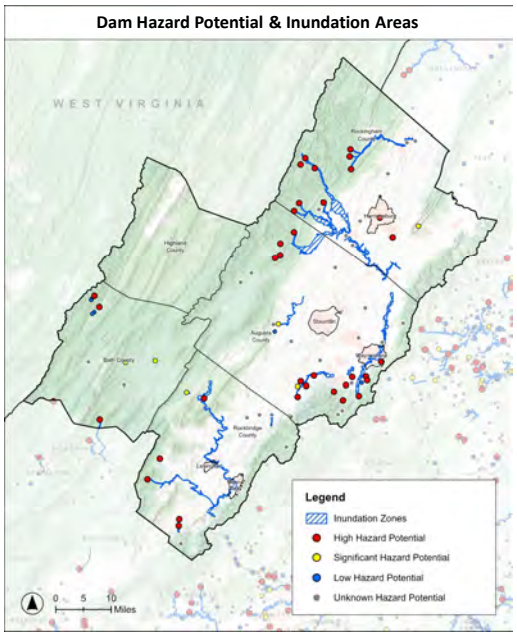
Example: Flooding

- Identified the Critical Facilities in:
  - Dam Inundation Areas





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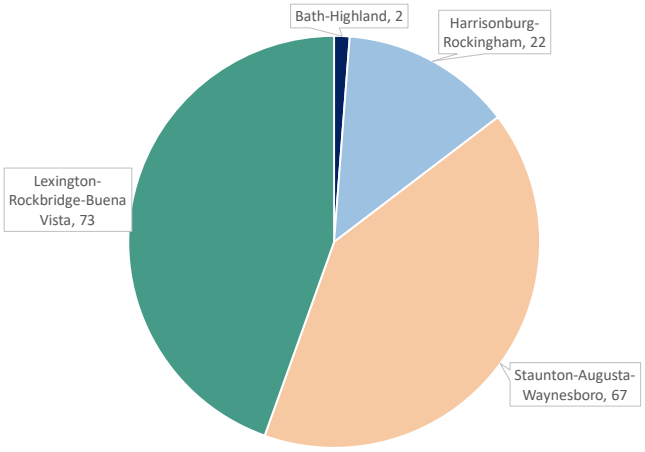
Flooding: Repetitive Loss Properties

- National Flood Insurance Program (NFIP)
- NFIP-insured structures that meet specific post-flood insurance claim criteria may be designated as Repetitive Loss or Severe Repetitive Loss Properties



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Next Steps

I. Finalize THIRA

II. Schedule Focused Discussions on Mitigation Strategies

III. Develop Local and Regional Mitigation Strategy

IV. 4th Steering Committee Meeting: Date TDB

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Hazard Mitigation Project Examples

Project Types

1. Acquisition/Demolition
2. Elevation
3. Mitigation Reconstruction
4. Generator
5. Flood Control (+ advance flood warning systems)
6. Stabilization and Restoration

1. ACQUISITION / DEMOLITION

Locality: City of Chesapeake

Project Name: "Acquisition/Demolition of 5 Repetitive Loss Structures"

Budget Information:

Total Project Award: $1,249,000.00
Federal Share: $1,145,710.00 (91.7%)
State Share: $0.00 (0%)
Local Share: $103,290.00 (8.2%)

Final Cost Lines –

ACTIVITY	***NUMBER***	***COST***	***TOTAL COST***
Acquisition Costs	4	$271,250.00 per unit	$1,085,000.00
Demolition, Debris Removal, and Site Restoration	4	$15,182.38 per unit	$60,729.50
Appraisal	4	$925.00 per unit	$3,700.00
Title Search, Closing Costs, and Legal Fees	4	$2,274.25 per unit	$9,097.00
TOTAL COSTS			**$1,158,526.50**

Summary: 5 Properties as Repetitive Loss (RL) identified for acquisition/demolition, 4 properties were completed successfully (1 withdrawal due to remaining available funds).

Photos:

1. Residence #1 Chesapeake, VA 23320




2. Residence #2 Chesapeake, VA 23320




3. Residence #3 Chesapeake, VA 23320




4. Residence #4 Chesapeake VA, 23320





2. ELEVATION

Locality: Northern Neck Planning District Commission

Project Name: "NNPDC Elevation of 2 SRL Properties"

Budget Information:

Total Project Award: $407,325.00
Federal Share: $407,325.00 (100%)
State Share: $0.00 (0%)
Local Share: $0.00 (0%)

Final Cost Lines –

ACTIVITY	***NUMBER***	***COST***	***TOTAL COST***
Engineering/Designs	2	$12,500 per unit	$25,000
Legal	2	$2,500 per unit	$5,000
Elevation of Homes	2	$40,000 per unit	$80,000
Construct New Building Foundation and Reconnection of Utilities	2	$103,718.66 Avg per unit	$207,437.31
Other	2	$12,908.28 Avg per unit	$25,816.52
Construction Management	1	Lump Sum	$18,430.65
Project Management	1	Lump Sum	$17,003.70
TOTAL COSTS			**$378,688.18**

Summary: 2 Properties as Severe Repetitive Loss (SRL) identified for elevation, homeowners paid contractors outside of federal award funding to increase height by 2' and 2'8" to allow clearance for vehicles under elevated structures.

Photos:

1. Residence #1 Lottsburg, VA 22511 (Northumberland County)



2. Residence #2 Farnham, VA 22460 (Richmond County)



3. MITIGATION RECONSTRUCTION

Locality: City of Norfolk

Project Name: "City of Norfolk – Mitigation Reconstruction of 1 Property"

Budget Information:

Total Project Award: $175,000.00
Federal Share: $150,000.00 (86%)
State Share: $0.00 (0%)
Local Share: $25,000.00 (14%)

Final Cost Lines –

ACTIVITY	***NUMBER***	***COST***	***TOTAL COST***
Engineering/Survey/Elevation Certificate	1	$15,550.00 per unit	$15,550.00
Site Preparation and Utilities	1	$24,700.00 per unit	$24,700.00
Excavation/Foundation/Masonry	1	$55,640.00 per unit	$55,640.00
Framing/Roofing	1	$31,695.00 per unit	$31,695.00
Exterior/Windows/Doors/Porches	1	$19,300.00 per unit	$19,300.00
Electrical/HVAC	1	$17,500.00 per unit	$17,500.00
Project Management	1	$8,325.00 per unit	$8,325.00
Interior/Drywall	1	$12,830.00 per unit	$12,830.00
TOTAL COSTS			**$170,000.00**

Summary: 1 residential property identified for mitigation reconstruction, meaning the existing property to be demolished and a new substantially similar home to be built on same parcel.

Photos:

1. Residence #1 Norfolk, VA 23518





4. GENERATOR

Project Name: “Water Supply System-wide Emergency Power Source”

Budget Information:

Total Project Award: $724,097.00
Federal Share: $373,575.00 (51.6%)
State Share: $99,620.00 (13.7%)
Local Share: $250,902.00 (34.7%)
Federal Management Costs $24,905.00

Final Cost Lines –

ACTIVITY	***NUMBER***	***COST***	***TOTAL COST***
Equipment Purchase	4	$34,870.17 per unit	$139,480.68
Installation	4	$117,391.19 per unit	$469,564.77
Other	4	$977.50 per unit	$3,910.00
Engineering Designs	1	$31,220.00 lump sum	$30,220.00
Construction Administration and Bidding Services	1	$10,090.00 lump sum	$10,090.00
TOTAL COSTS			**$653,265.45**

Summary: Purchase and installation of 4 permanent emergency generators at water stations in order to support maintaining critical water supply during power outages.

Photos:









5. FLOOD CONTROL / ADVANCE WARNING SYSTEMS

Locality: Town of Pulaski

Project Name: "Pulaski, Town of – Advance Flood Warning System for Peak Creek"

Budget Information:

Total Project Award: $55,000.00
Federal Share: $41,250.00 (75%)
State Share: $11,000.00 (20%)
Local Share: $2,750.00 (5%)
Federal Management Costs $2,750.00

Final Cost Lines –

ACTIVITY	***NUMBER***	***COST***	***TOTAL COST***
Equipment for Weather Alert Systems	1	$34,858.00 per unit	$34,858.00
Installation	1	$10,000.00 per unit	$10,000.00
Setup and Training	1	$2,795.00 per unit	$2,795.00
Software	1	$2,126.00 per unit	$2,126.00
Shipping	1	$700.00 per unit	$700.00
Construction Management	1	Lump Sum	$2,671.00
Maintenance Contract (1 yr)	1	Lump Sum	$1,850.00
TOTAL COSTS			**$55,000.00**

Summary: Installation of 4 automatic threshold reporting weather stations (ALERT-based) equipped to collect a full array of data to provide a comprehensive analysis of upstream conditions and provide advance warning of evolving conditions to emergency personnel in the town downstream

Photos:





FLOOD CONTROL / ADVANCE WARNING SYSTEMS

Locality: Rockingham County

Project Name: "Rockingham County – New Stormwater Basin"

Budget Information:

Total Project Award: $730,000.00
Federal Share: $547,500.00 (75%)
State Share: $146,000.00 (20%)
Local Share: $36,500.00 (5%)
Federal Management Costs: $36,500.00

Final Cost Lines –

ACTIVITY	***NUMBER***	***COST***	***TOTAL COST***
Legal Fees	0	$0.00 lump sum	$0.00
Construction Management	0	$0.00 lump sum	$0.00
Land Acquisition	0	$0.00 lump sum	$0.00
Design	0	$0.00 lump sum	$0.00
Construction	1	$765,005.84 lump sum	$765,005.84
Sediment and Erosion Control	2000	$1.00 per unit	$2,000.00
TOTAL COSTS			**$767,005.84**

Summary: Creation of a new stormwater detention basin upstream of the areas that experience frequent flooding, with the basin outlet structure designed to release water at a controlled rate, thereby significantly reducing the frequency of damaging flood events.

Photos:





Figure 1Detention pond area above embankment



Figure 2Embankment views and discharge downstream



Figure 3Embankment views and intake upstream

6. STABILIZATION AND RESTORATION

Locality: King George County

Project Name: "King George County – Fairview Beach Land Stabilization Project"

Budget Information:

Total Project Award: $2,328,770.00
Federal Share: $1,746,577.50 (75%)
State Share: $465,754.00 (20%)
Local Share: $116,438.50 (5%)

Final Cost Lines –

PHASE A: ACTIVITY	***NUMBER***	***COST***	***TOTAL COST***
Engineering Designs	1	$213,148.49 per unit	$213,148.49
Landscaping & Site Development Engineering Cost	1	$51,787.05 per unit	$51,787.05
Structural Engineering Design Cost	1	$46,754.09 per unit	$46,754.09
TOTAL PHASE 1 COSTS			**$311,689.63**

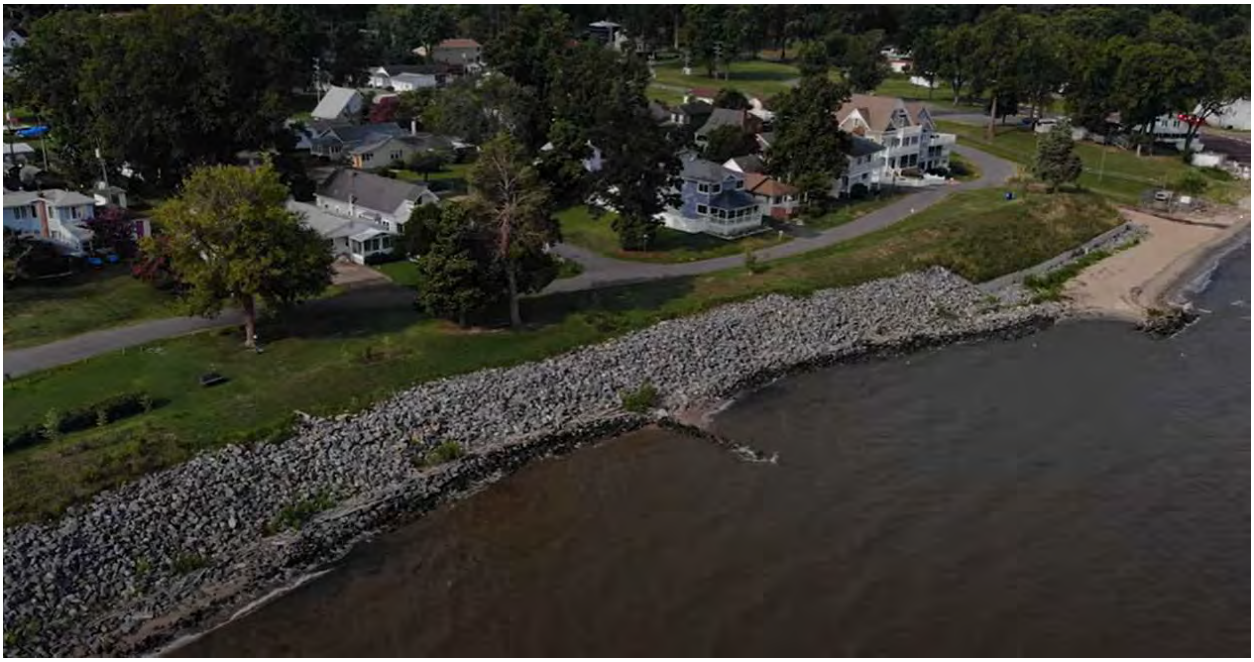
PHASE B: ACTIVITY	***NUMBER***	***COST***	***TOTAL COST***
Construct Temporary Site Access	1	$585,033.91 per unit	$585,033.91
Construct Stone Breakwaters	1	$57,553.66 per unit	$57,553.66
Construct Reinforced Concrete Seawalls	1	$433,325.90 per unit	$433,325.90
Construct Stone Reinvents	1	$184,429.14 per unit	$184,429.14
Geotextiles, Drainage, & Erosion Control	1	$438,290.53 per unit	$438,290.53
Storm Drainage Improvements	1	$22,268.76 per unit	$22,268.76
Permits & Fees	1	$23,800.44 per unit	$23,800.44

Construction Management	1	$99,911.99 per unit	$99,911.99
Project Management	1	$9,022.40 lump sum	$9,022.40
Engineering Designs	1	$50,870.90 per unit	$50,870.90
TOTAL COSTS			**$1,904,507.63**

Summary: Phased into 2 parts, the mitigation project worked to stabilize the Fairview Beach riverbank area of King George County by construction of a new seawall, breakwater, and revetment structures stabilizing the toe of the river bank to protect against further erosion; Phase 1: engineering design study to determine the best mitigation solution; Phase 2: project construction;

Photos:

Video Link: https://www.youtube.com/watch?v=ciHhY5kq4yI







Greene County- Acquisition/Demolition

The homeowners were experiencing flooding anytime there was a decent rain storm. They worked with the county on an acquisition project. The county acquired the property which allowed the homeowners to be paid fair market value for their property and move their family out of the flood zone. The property is now county owned and maintained and will remain as open space.

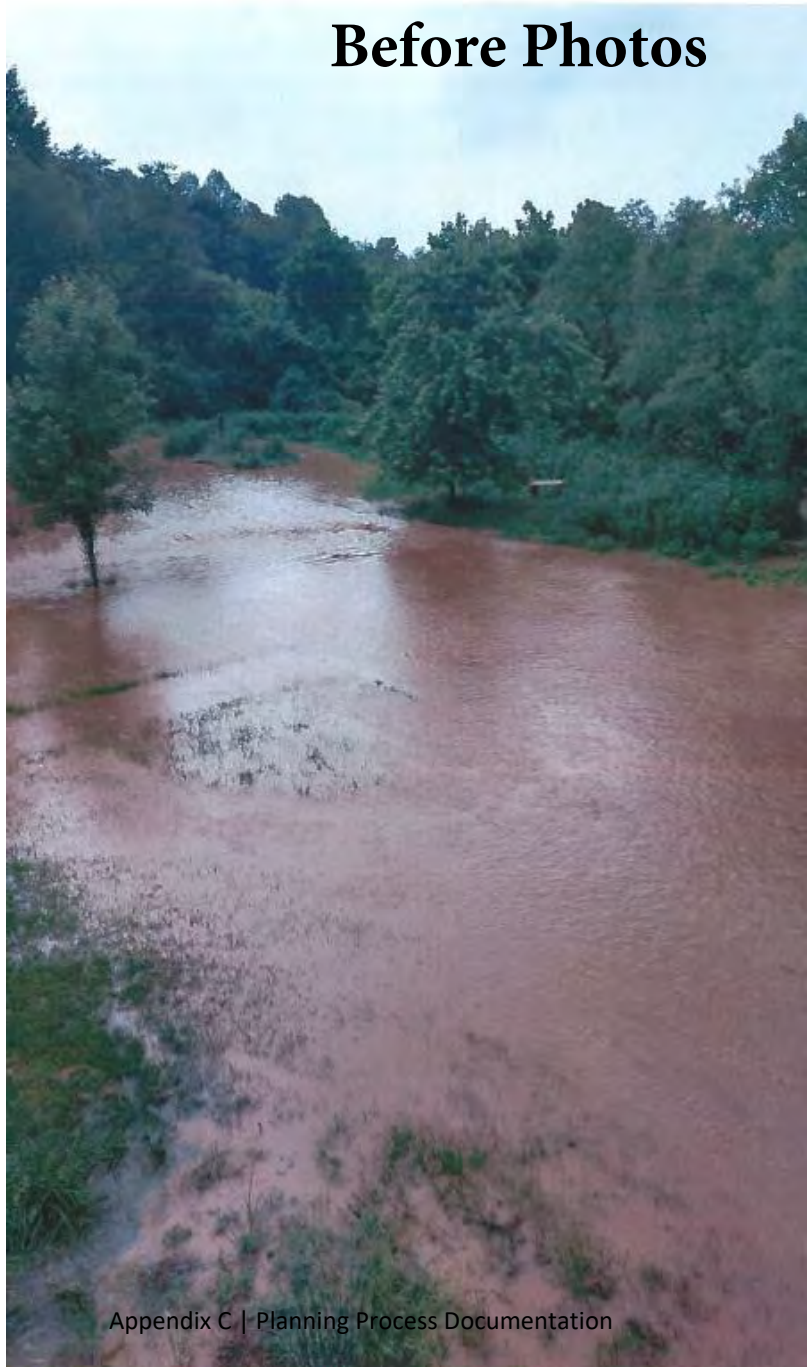
Acquisition/Demolition Project Budget Example

ACTIVITY	*NUMBER*	*COST*	*TOTAL COST*
Appraisal	1	$500 per unit	$500
Acquisition Cost	1	$250,200 per unit	$250,200
Demolition	1	$10,000 per unit	$10,000
Legal Fees	1	$6,000 per unit	$6,000
TOTAL COSTS			**$266,700**

Management Cost Budget Example

ACTIVITY	*NUMBER*	*COST*	*TOTAL COST*
Personnel	1	$1,000 per unit	$1,000
Agency Cost	1	$12,335 per unit	$12,335
TOTAL COSTS			**$13,335**

Before Photos













After Photos





Hazard Mitigation Plan Project Budget Example

ACTIVITY	*NUMBER*	*COST*	*TOTAL COST*
Organize Resources Committee/Update Profiles	1	$16,450 per unit	$16,450
Revise Hazard Identification and Risk Analysis	1	$32,190 per unit	$32,190
Community Assessment, Profiles and Public Outreach	1	$12,150 per unit	$12,150
Conduct HAZUS	1	$43,590 per unit	$43,590
Revise Mitigation Goals and Strategies	1	$26,900 per unit	$26,900
Adoption/Implementation	1	$32,600 per unit	$32,600
TOTAL COSTS			**$163,880**

Management Cost Budget Example

ACTIVITY	*NUMBER*	*COST*	*TOTAL COST*
Personnel	1	$8,194 per unit	$8,194
TOTAL COSTS			**$8,194**

Generator for Critical Facilities Project Budget Example

ACTIVITY	*NUMBER*	*COST*	*TOTAL COST*
Generator	1	$153,000 per unit	$153,000
Switches and Feeders	1	$84,000 per unit	$84,000
Rigging, Site	1	$6,600 per unit	$6,600
Labor and Installation	1	$43,000 per unit	$43,000
Contingencies	1	$14,330 per unit	$14,330
TOTAL COSTS			**$300,930**

Management Cost Budget Example

ACTIVITY	*NUMBER*	*COST*	*TOTAL COST*
Personnel	1	$15,046 per unit	$15,046
TOTAL COSTS			**$15,046**

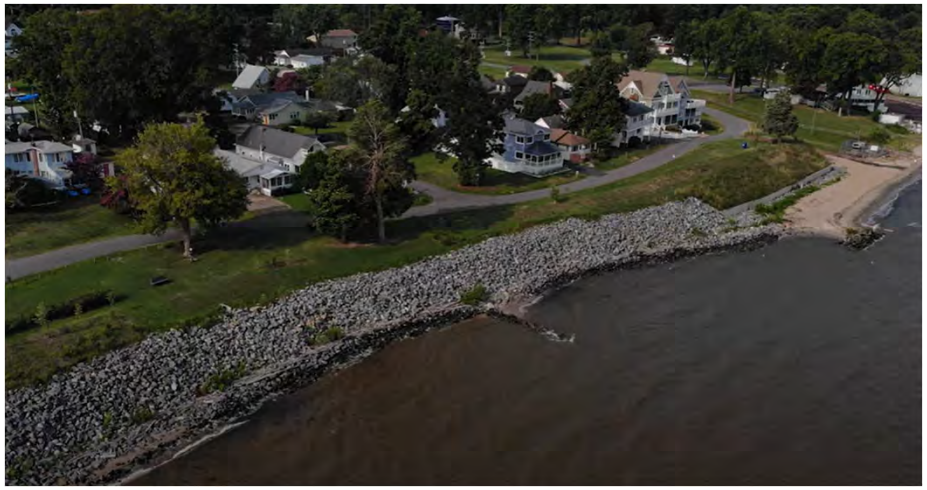
King George County - Land Stabilization Project

The mitigation project included an engineering design study and construction of new seawall, breakwater, and revetment structures to stabilize the toe of the river-bank and protect it from further erosion. The steep river-bank overburden soil has been reduced to a more stable gradient with slope grading activities. The graded slope soils were stabilized with the application of erosion control blankets and matting, and were permanently protected from surface erosion with the establishment of groundcover vegetation and landscape shrubs.

Before



After



Phased Stabilization Project Budget Example

Phase A

ACTIVITY	NUMBER	COST	TOTAL COST
Engineering Designs	1	$200,440 per unit	$200,440.00
Landscaping & Site Development Engineering Cost	1	$75,165 per unit	$75,165.00
Structural Engineering Design Cost	1	$31,319 per unit	$31,319.00
TOTAL COSTS			**$306,924.00**

Phase B

ACTIVITY	NUMBER	COST	TOTAL COST
Construct Temporary Site Access	1	$600,000 per unit	$600,000.00
Construct Stone Breakwaters	1	$78,304 per unit	$78,304.00
Construct Reinforced Concrete Seawalls	1	$327,274 per unit	$327,274.00
Construct Stone Reinvents	1	$193,343 per unit	$193,343.00
Geotextiles, Drainage, & Erosion Control	1	$565,746 per unit	$565,746.00
Storm Drainage Improvements	1	$88,083 per unit	$88,083.00
Permits & Fees	1	$25,000 per unit	$25,000.00
Construction Management	1	$93,956 per unit	$93,956.00
Project Management	1	$50,140 per unit	$50,140.00
TOTAL COSTS			**$2,021,846.00**

Celebrating 55 Years

CSPDC

Central Shenandoah Planning District Commission

SIGN-IN SHEET

CSHMP Steering Committee Meeting #3

March 10, 2025 at 9:30 AM

NAME	AFFILIATION	EMAIL	PHONE
L. Jordan Combs	Maury Service Authority	J. combs@msaplant.org	540-784-8036
Austin Garber	Town of Timberville	townmanager@townoftimberville.com	540-896-7058
Harley Gardner	Highland Co.	hgrdnr@yahoo.com	540 292 0456
Paul Kastner	VMI	kastnerpt@vmi.edu	540 784 6197
Jamison Ryder	City of Harrisonburg	Jamison.Ryder@harrisonburgva.gov	540 2178838
Matthew Redifer	Maury Service Authority	m.redifer@msaplant.org	(540) 784-6729
Doug Wolfe	Augusta County	dwolfe@co.augusta.va.us	540 245 5700
Mike Gozo	VDEM	mike.gozo@vdem.virginia.gov	804 516 5793
Daniel Johnson	VDEM	daniel.johnson@vdem.virginia.gov	804-216-7107
Madison L'Heureux	VDEM	madison.lheureux@vdem.virginia.gov	804-489-9072
Cole Taggart	VDEM	cole.taggart@vdem.virginia.gov	
Peter Homan	VDEM	peter.homan@vdem.virginia.gov (joined virtually)	
Katie Vugdalic	VDEM		

Celebrating 55 Years

CSPDC

Central Shenandoah Planning District Commission

SIGN-IN SHEET

CSHMP Steering Committee Meeting #3

March 10, 2025 at 9:30 AM

NAME	AFFILIATION	EMAIL	PHONE
Olivia Wright	SVP	owright@thevalleyshenandoah.com	540 394 8801
Jonathan Knotts	Augusta Health	jeknotts@augustahealth.com	540 255 6710
Amanda Weaver	VDEM	AMANDA.WEAVER@VDEM.VIRGINIA.GOV	804 350 5117
Cathy Critzer	City of Waynesboro DEM	CRITZERC@CI.WAYNESBORO.VA.US	540 241 2298
Alex Wilmer	Bridgewater	awilmer@bridgewater.edu	540-908-4312
JOE PELLETIER	COLUMBIA GAS OF VA	AJPELLETIER@NISOURCE.COM	540-809-7738
Hilary Cronin	JMU	CRONINHA@JMU.EDU	540.578.1382
Jordan Good	Central Shen Health District (VDH)	jordan.good@vdh.virginia.gov	540-290-4100
Rachel Kinzer	CSPDC	rachel@cspdc.org	
Elizabeth Goodloe	CSPDC	elizabethg@cspdc.org	
Jeremy Crute	CSPDC	jeremy@cspdc.org	

Celebrating 55 Years

CSPDC

Central Shenandoah Planning District Commission

SIGN-IN SHEET

CSHMP Steering Committee Meeting #3

March 10, 2025 at 9:30 AM

NAME	AFFILIATION	EMAIL	PHONE
Jennifer Hottinger	DEQ	jennifer.hottinger@deq.virginia.gov	804-652-5812
Gene Stewart	VDEM	gene.stewart@vdem.virginia.gov	540-383-3126
Daniel Swisher	VDOF	daniel.swisher@dof.virginia.gov	804-346-6124
Clay Shiflet	Rockingham	cshiflet@rockinghamcountyva.gov	810-6684
Brad Zollman	Rockbridge County, Town Goshen, Glasgow	bzollman@rockbridgecountyva.gov	540-319-9878
Nick King	Augusta Water	nking@augustawater.com	540 487-4613
Corey Wood	TOWN OF CRAIGSVILLE		
Harvey Sprouse	" " "		540-997-9158
Michael King	Elkton PD	MKing@townofelkton.com	540-560-3503
Jason Ball	Staunton Fire	ball@ci.staunton.va.us OE	540-810-4944
Josh Fore	Maury Service Authority	j.fore@msaplant.org	540-784-3008

LOCALITY/SPECIAL DISTRICT MEETINGS – DATES + ROSTER

Date	Locality/District	Meeting Attendees (Non-CSPDC Staff)
April 14, 2025	Bath County	Andy Seabolt, Emergency Management Coordinator
		Michael Bender, County Administrator
	Highland County	Harley Gardner, Emergency Manager
		Jerri Botkin, County Administrator
		Robert Kelly, County Sheriff
		Paxton Grant, Highland County Sheriff's Office
May 2, 2025	Town of Bridgewater	Gwen Gottfried, Town Planner
		Greg Dustin, Stormwater Management
		Rick Biller, Bridgewater College Police
May 6, 2025	Town of Dayton	Brian Borne, Town Manager
		Gary Corder, Town Planner
May 9, 2025	Augusta County	Patrick Lam, Emergency Management Coordinator
		Doug Wolfe, Director of Community Development
		Nick King, Augusta Water Safety Manager
		Hal McWhorter, Augusta Water Superintendent
May 12, 2025	Town of Timberville	Austin Garber, Town Manager
May 13, 2025	Town of Mount Crawford	Libby Clark, Town Manager
May 21, 2025	Town of Grottoes	Tara Morris, Town Planner
		Jason Sullivan, Police Chief
May 23, 2025	City of Lexington	Arne Glaeser, Director of Planning & Development
		Trent Roberts, Fire Marshall
May 27, 2025	James Madison University	Hilary Cronin, Director of Risk and Emergency Mgmt.
		Ali Sloop, Stormwater Coordinator
May 28, 2025	City of Harrisonburg	Paul Helmuth, Deputy Emergency Coordinator
		Jamison Ryder, Emergency Management Generalist
June 5, 2025	Town of Elkton	Gaither Hurt, Director of Public Works
		Delores Hammer, Director of Community Development
		Ryan Insana, Sergeant

June 5, 2025	Rockbridge County	Nathan Ramsey, Fire Chief
		Brad Zollman, Deputy Chief
June 6, 2025	City of Waynesboro	Gary Critzer, Director of Emergency Management
		Andrew Holloway, Fire Chief
June 11, 2025	City of Staunton	Rebecca Joyce, Housing Planner
		Hunter Moore, Environmental Programs Specialist
		Willow Hughes, Environmental Programs Administrator
		Rodney Rhodes, Director of Community Development
		Jason Ball, Fire Chief
		Perry Weller, Deputy Fire Chief
		Brian Butler, Captain
June 11, 2025	City of Buena Vista	Wayne Handley, Chief of Police
		Tom Roberts, Director of Community Development
		Alan McMahan, Public Works
June 12, 2025	Town of Goshen	Tom McCraw, Mayor
		Steve Bickley, Vice Mayor
	Rockingham County	Clay Shiflet, Battalion Chief
		Jeremy Holloway, Fire/Rescue Chief
July 16, 2025	Town of Craigsville	Harvey Sprouse, Town Council Member
		Richard King, Mayor
July 22, 2025	Town of Monterey	Jay Garber, Mayor
July 28, 2025	Town of Broadway	Tracy Shiflet, Town Manager
August 19, 2025	Bath County Service Authority	Bart Perdue, BCSA Administrator
		Michael Bender, County Administrator
		Cole Taggart, VDEM Region 6 All Hazards Planner

Mitiga. on Strategies Meeng
Rockingham County
June 12, 2025

Agenda

I. CSHMP Update

II. Ranking Threats/Hazards

Flooding & Dam Failure	Hurricanes	High Winds	Wildfire
Drought	Karst & Sinkholes	Extreme Temperatures	Severe Winter Weather
Infectious Disease Outbreak	Hazardous Materials Release	Utility & Infrastructure Failure	Active Assailant

III. Review Existing Mig aon Str ategies

IV. Add/Prioriz e New Mi gation Strategies

Existing Mitigation Strategies	
Hazard	**Mitigation Strategy**
Multi-Hazard	Support implementa. on of structural and non-structural mitigaon activities on private or public property to reduce exposure to natural and man-made hazards. Eligible projects include but are not limited to acquisition, elevation, minor structural flood control projects, relocation of structures, retrofitting of existing structures, infrastructure protection measures, stormwater and wastewater improvements, advanced warning systems, hazard gauging systems, hazard education, and wildfire mig ation projects.
	**** Maintain a relationship with the Southern Shenandoah Chapter of Virginia Voluntary Organizations Active in Disaster (VOAD), to share knowledge and resources throughout the preparation, response, and recovery phases of a disaster.**
	**** Continue support of the Harrisonburg-Rockingham Disaster Recovery Committee, a volunteer group made up of 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.**
	**** Continue support of the Harrisonburg and Rockingham SPCA emergency shelter for pets and livestock during a disaster. Volunteers trained to work with animals during disaster situations staff the shelter. Fire Chief also serves on the State Animal Response Committee. Completed a grant-funded project that provided a pet emergency supply trailer including supplies and training.**
Flooding	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 idenfic ation and mapping risk 2) Responsible floodplain management 3) Flood insurance Sample activities include but are not limited to: maintaining publicly accessible and accurate Flood Insurance Rate Maps (FIRMs); adopting and enforcing a compliant floodplain ordinance; and provide general assistance and education to community members regarding the flood insurance program.
	**** Implement mitigation strategies within the Lake Shenandoah watershed to address recurrent urban flooding. Continue work to select suitable mitigation strategies, including increased detention capacity and increased conveyance capacity. Once suitable options are determined, move forward with implementation when resources are available.**

	**** Seek funding to continue county-wide residential flood mitigation project that calls for acquisition, elevation, floodproofing of properties identified as at-risk of future flooding. Most of these houses are located in the Naked Creek, Rawley Springs, and Bergton/Criders area of the County.** [marked as delayed] Note: These properties are now mitigated as result of the Germany River Project.
	**** Acquire houses located in the floodplain along Naked Creek and have land deeded in Open Space.** [marked as delayed] Note: Property owners not willing to sell.
	**** Begin the stream remediation projects sponsored by NRCS on Germany River, Naked Creek, and Dry Run River that call for streambank restoration, removal of watershed impairments and installation of debris basins to repair damage caused by Hurricane Isabel.** [marked as completed]
	**** Rockingham and Page Counties to install an I-FLOW gauge on Naked Creek as well as complete stream remediation.** [marked as completed]
	**** Install and maintain I-FLOW gauges in two dams: Dry River and Hone Quarry in the middle of each dam.** [marked as completed]
Wildfire	Encourage the lessening of potential wildfires in the community and region by: 1) Education and outreach to residents, especially those that live in woodland areas and the Wildland-Urban Interface (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 a wildfire.
	**** Continue participation in Department of Forestry's Firewise Program, a community awareness and education program that encourages and acknowledges woodland communities to take action that minimizes home loss to wildfires by preparing for a fire before it occurs.**

New Mitigation Strategies	
Hazard	**Mitigation Strategy**
Flooding	
Hurricanes	
High Winds	
Wildfire	
Drought	
Karst/Sinkholes	
Extreme Temperatures	
Winter Weather	
Infectious Disease Outbreak	
Hazardous Materials Release	
Utility or Infrastructure Failure	
Acv e Assailant	

Rachel Kinzer

From: Rachel Kinzer
Sent: Tuesday, September 02, 2025 2:37 PM
To: [redacted]@yahoo.com; [redacted]@rocketmail.com
Cc: Jeremy Crute
Subject: Revised Local Strategies - Hazard Mitigation Plan
Attachments: Town of Craigsville - Local Mitigation Strategies 9.2.25.docx

Hello [redacted] and [redacted],

Thank you again for your continued participation in the Central Shenandoah Hazard Mitigation Plan Update. I appreciate you taking the time to meet with me on July 16th to workshop your Local Mitigation Strategies. As we discussed, for a project to be eligible for FEMA/VDEM grant funding, it must be supported by a strategy in the Hazard Mitigation Plan. To maximize your access to funding, it is important to ensure that any mitigation projects you anticipate pursuing within the next five years are reflected in your local strategies.

Please find attached an updated draft of your local strategies, revised based on our previous discussion. We request that you review these materials and confirm they accurately represent your priorities. Please provide feedback regarding any necessary revisions, new project additions, or strategies you wish to remove. Also, let us know if we misrepresented the priority level, responsible party, or time frame of each strategy. FEMA is requiring this information to be more specific than in previous iterations.

For your reference:

- Priority level: we used 'High,' 'Medium,' and 'Low' – these are purely based on your own judgement.
- Responsible department: we must specify the department that would take on the strategy (FEMA no longer accepts 'Town').
- Time frame: we used the following measures (FEMA no longer allows 'ongoing'):
    - Short Term (within 1-3 years)
    - Medium Term (within 5 years/before next HMP update)
    - Long Term (beyond 5 years)
    - Annually, Quarterly, Bi-Monthly, etc. for regular, ongoing tasks

I appreciate your time and help reviewing this and would be happy to continue workshopping your strategies as needed.

Thank you,
Rachel

Rachel Kinzer
Regional Planner
Central Shenandoah Planning District Commission
Email: rachel@cspdc.org
Work: (540) 885-5174 x 113
Cell: (434) 390-4892

NFIP SURVEY ROSTER

Locality	Contact
Augusta County	Doug Wolfe, Director of Community Development
Bath County	Sherry Ryder, Zoning Administrator
Highland County	Josh Simmons, Zoning Administrator
Rockbridge County	Viveca Hanson, Planning & Zoning Specialist
Rockingham County	Ross Morland, Director of Engineering
City of Buena Vista	Tom Roberts, Director of Community Development
City of Harrisonburg	Tyler Blanks, Zoning Administrator
City Lexington	Arne Glaeser, Director of Planning & Development
City of Staunton	John Glover, Building Official
City of Waynesboro	Laura Martin, Zoning Administrator

NFIP SURVEY – EMAIL EXAMPLE

Rachel Kinzer

From: Rachel Kinzer
Sent: Friday, August 15, 2025 11:43 AM
To: [redacted]@ci.waynesboro.va.us
Subject: Required Input: NFIP Survey for Hazard Mitigation Plan Update
Attachments: Waynesboro NFIP Survey.docx

Hello [redacted],

I am a Regional Planner with the Central Shenandoah Planning District Commission, and I work on our Hazard Mitigation Plan update. I pulled your contact information from DCR's floodplain management directory, and I am requesting your input on Waynesboro's participation in the National Flood Insurance Program. This is a required component of the plan; if left incomplete/not reviewed for this update, FEMA will not approve our HMP.

In an attempt to keep this short and simple, I am attaching a survey that we included in the previous plan. Could you review it and send it back with any updates or comments? If you do not have any changes or comments, then please send me a message saying so (we also have to include documentation of locality participation in the appendices of the plan).

Please let me know if you have any questions.

Thank you,

Rachel

Rachel Kinzer
Regional Planner
Central Shenandoah Planning District Commission
Email: rachel@cspdc.org
Work: (540) 885-5174 x 113
Cell: (434) 390-4892

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) SURVEY

MUNICIPALITY:

1. FLOODPLAIN IDENTIFICATION AND MAPPING			
Requirement	***Recommended Action***	***Yes/No***	***Comments***
a. Does the municipality maintain accessible copies of an effective Flood Insurance Rate Map (FIRM)/Digital Flood Insurance Rate Map (DFIRM)? Does the municipality maintain accessible copies of the most recent Flood Insurance Study (FIS)?	Place these documents in the local libraries or make available publicly.		
b. Has the municipality adopted the most current DFIRM/FIRM and FIS?	State the date of adoption, if approved.		
c. Does the municipality support request for map updates?	If yes, state how.		
d. Does the municipality share with Federal Emergency Management Agency (FEMA) any new technical or scientific data that could result in map revisions within 6 months of creation or identification of new data?	If yes, specify how.		
e. Does the municipality provide assistance with local floodplain determinations?	If yes, specify how.		
f. Does the municipality maintain a record of approved Letters of Map Change?	If yes, specify the responsible office.		

2. FLOODPLAIN MANAGEMENT			
Requirement	***Recommended Action***	***Yes/No***	***Comments***
a. Has the municipality adopted a compliant floodplain management ordinance that, at a minimum, regulates the following:	If yes, answer questions (1) through (4) below.		
(1) Does the municipality issue permits for all proposed development in the Special Flood Hazard Areas (SFHAs)?	If yes, specify the office responsible.		
(2) Does the municipality obtain, review, and utilize any Base Flood Elevation (BFE) and floodway data, and/or require BFE data for subdivision proposals and other development proposals larger than 50 lots or 5 acres?	If yes, specify the office responsible.		
(3) Does the municipality identify measures to keep all new and substantially improved construction reasonably safe from flooding to or above the BFE, including anchoring, using flood-resistant materials, and designing or locating utilities and service facilities to prevent water damage?	If yes, specify the office responsible.		
(4) Does the municipality document and maintain records of elevation data that document lowest floor elevation for new or substantially improved structures?	If yes, specify the office responsible.		
b. If a compliant floodplain ordinance was adopted, does the municipality enforce the ordinance by monitoring compliance and taking remedial action to correct violations?	If yes, specify how.		

2. FLOODPLAIN MANAGEMENT			
Requirement	***Recommended Action***	***Yes/No***	***Comments***
c. Has the municipality considered adopting activities that extend beyond the minimum requirements? Examples include: • Participation in the Community Rating System • Prohibition of production or storage of chemicals in SFHA • Prohibition of certain types of structures, such as hospitals, nursing homes, and jails in SFHA • Prohibition of certain types of residential housing (manufactured homes) in SFHA • Floodplain ordinances that prohibit any new residential or nonresidential structures in SFHA	If yes, specify activities.		

3. FLOOD INSURANCE			
Requirement	***Recommended Action***	***Yes/No***	***Comments***
a. Does the municipality educate community members about the availability and value of flood insurance?	If yes, specify how.		
b. Does the municipality inform community property owners about changes to the DFIRM/FIRM that would impact their insurance rates?	If yes, specify how.		
c. Does the municipality provide general assistance to community members regarding insurance issues?	If yes, specify how.		

Central Shenandoah Hazard Mitigation Plan (CSHMP)
Steering Committee Meeting

Augusta Community Care Conference Rooms
64 Sports Medicine Drive, Fishersville, VA 22939

Friday, August 8, 2025
9:30 AM – 12:00 PM

Agenda

9:30 AM **Welcome**

9:35 AM **Project Update**

- Timeline Overview
- THIRA Findings
- Local Meeting Themes

10:00 AM **Break**

10:10 AM **Presentation of Regional Goals and Strategies Framework**

10:25 AM **Mitigation Strategies Activity**

11:45 AM **Next Steps**

- Finalization of CSHMP
- Plan Adoption Process
- Plan Maintenance

12:00 PM **Closing and Lunch** *(optional)*

Central Shenandoah Hazard Mitigation Plan Steering Committee Meeting

AUGUST 8, 2025



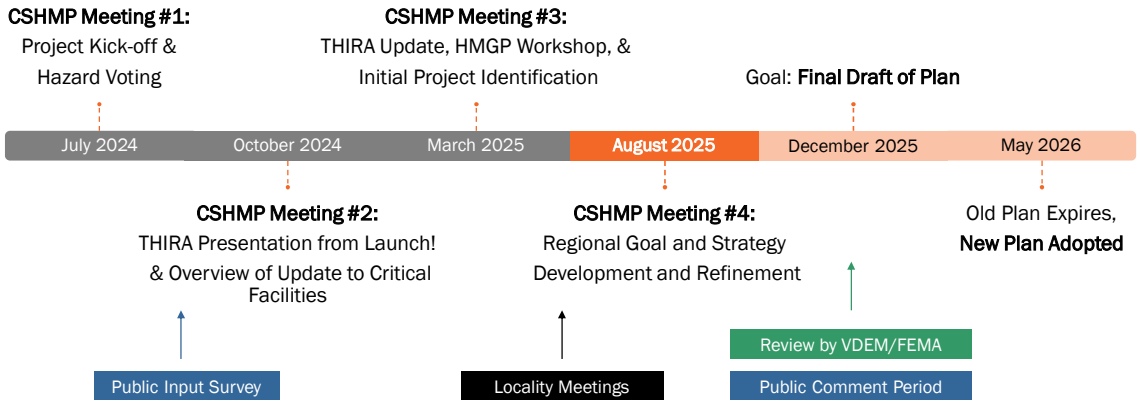
1

Agenda

I. Recap of Project Timeline
II. Threat & Hazard Risk Assessment Findings
III. Themes From Locality Meetings
IV. Updates to Regional Goals & Strategies
V. Next Steps

2

Project Timeline



3

Threat & Hazard Risk Assessment Findings

Flooding	Hurricanes*	High Winds	Wildfire
Drought	Karst & Sinkholes	Extreme Temperatures	Severe Winter Weather
Infectious Disease Outbreak	Hazardous Materials Release	Utility & Infrastructure Failure	Active Assailant

4

HIGH RISK

Flooding

An overflow of water onto normally dry land caused by rising water in an existing waterway, such as a river, stream, or ditch.

A flash flood is a sudden, severe flood, typically caused by heavy rainfall in a short period, often within six hours, characterized by rapidly rising water levels and strong currents.

Findings:

Critical Facilities

- 96 critical facilities are in 100-year flood zones.
- 48 critical facilities are in 500-year flood zones.

Limited monitoring capabilities increase the risk of flooding to the Region.

NFIP-Insured Structure Losses

- 137 Repetitive Loss properties
- 27 Severe Repetitive Loss properties

The City of Waynesboro, City of Buena Vista, and Rockbridge County had the highest number of NFIP-insured structures designated as repetitive or severe repetitive loss.

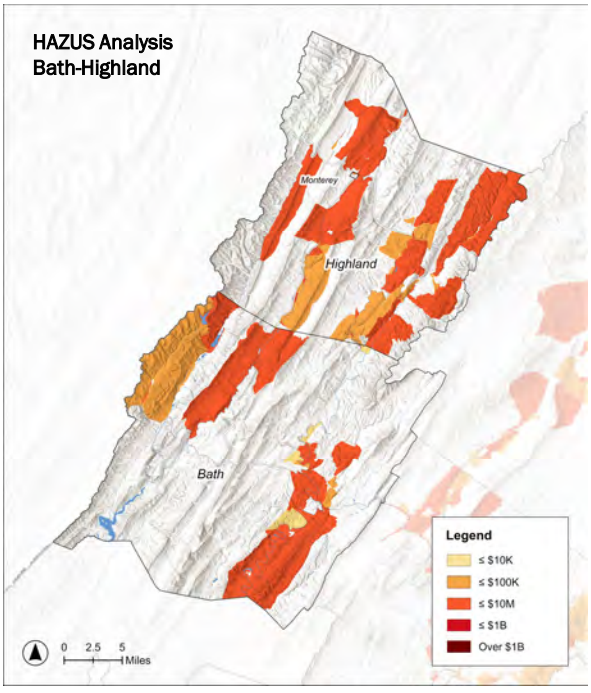
5

HIGH RISK

Flooding

An overflow of water onto normally dry land caused by rising water in an existing waterway, such as a river, stream, or ditch.

A flash flood is a sudden, severe flood, typically caused by heavy rainfall in a short period, often within six hours, characterized by rapidly rising water levels and strong currents.



6

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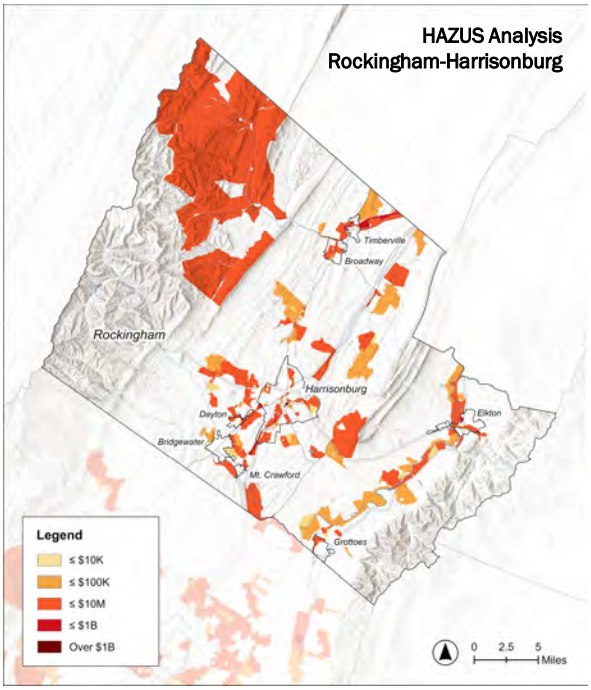

7

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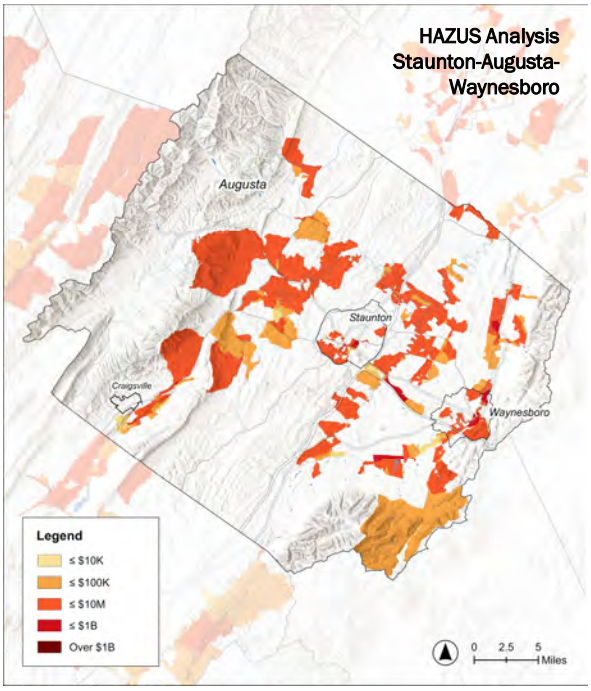

8

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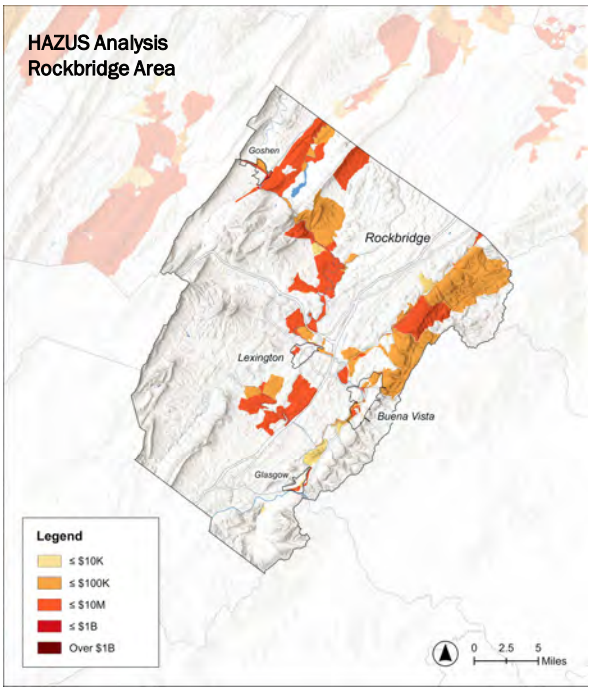

9

HIGH RISK

Wildfire

An outdoor fire that is not controlled, supervised, or planned.

Findings:

285 incidents in the Region between 2014-2024

- 8,479 acres burned
- It is estimated that the value of timber damage was almost 10 times the value of structural damage

460 critical facilities lie within the US Forest Service's definition of wildland-urban interface

- Including 31 properties listed on the National Register of Historic Places

10

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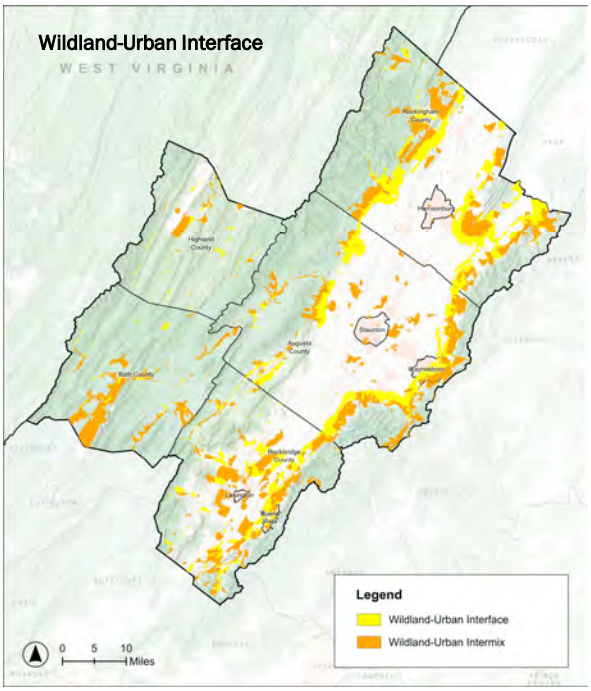


11

HIGH RISK

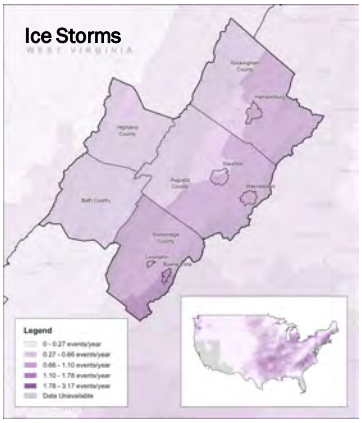
Severe Winter Weather

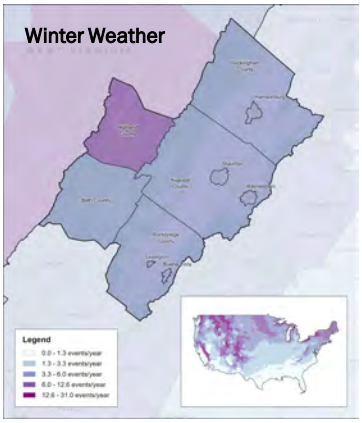
Storms including snow, sleet, freezing rain, or a mixture of these forms of precipitation.

Findings:

Estimated Annual Frequencies:

- Ice Storms: range between 0.5 – 1.75 events/year
- Winter Weather: range between 3.3 – 12.6 events/year





12

HIGH RISK

Hazardous Materials Release

An unintentional leak, spillage, discharge, or release of HazMat (chemical, biological, or radiological) which pose a threat to human health and safety and the surrounding environment.

Findings:

Several region-specific factors increase the probability and impact of hazardous materials release:

- I-81 and I-64, likelihood of traffic incidents
- Presence of active rail
- Agriculture and Manufacturing sectors
- Karst topography
- Aging infrastructure

We have existing measures: Central Shenandoah Hazardous Materials Response Team, locally maintained HazMat report databases

13

MEDIUM RISK

Hurricane*

A tropical cyclone with a sustained surface wind of at least 39 mph. This hazard profile includes both tropical storms (windspeeds 39-73 mph) and hurricanes (windspeeds of 74 mph and greater) based on the Saffer-Simpson scale.

Findings:

Historic hurricanes have led to severe flooding and damage to our communities.

Most hurricanes reduce to tropical storms or depressions by the time they reach the Valley (come inland).

The 2023 Commonwealth of Virginia HMP estimated that the Region is at risk of losing about $323,500 annually given a 1-percent annual chance hurricane (due to wind).

- The greatest loss estimates were in Rockingham, Augusta, and Harrisonburg

14

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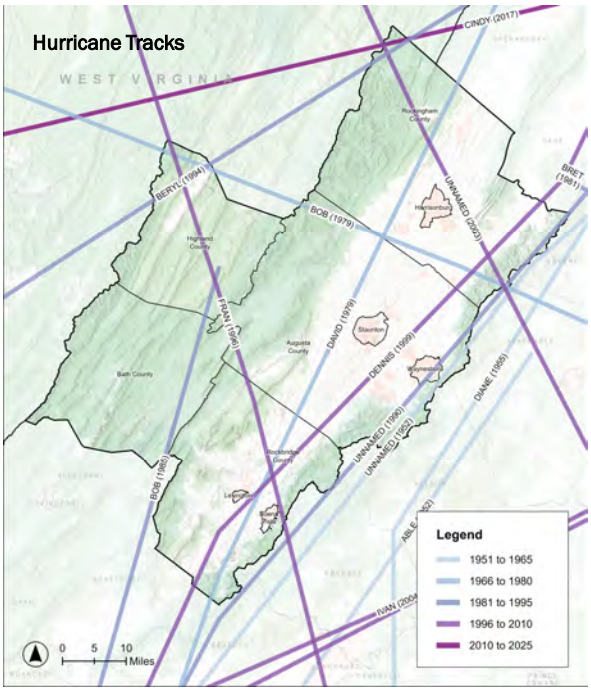


15

MEDIUM RISK

Drought

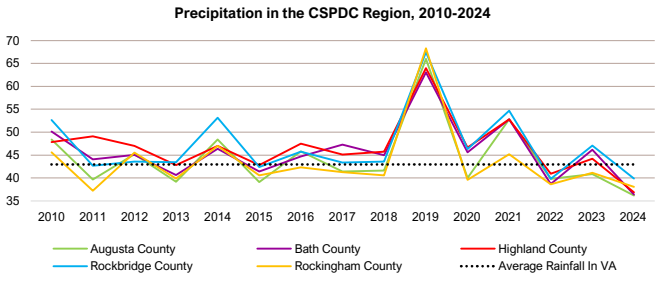
A period of abnormally dry weather due to a deficiency of precipitation that persists long enough to produce serious effects like agricultural losses; water supply shortages; and impacts on public health and energy production.

Findings:

Public Input Survey: On average, respondents were most concerned about a drought affecting their area.

The Region has experienced drought conditions over the past decade, with more moderate or extreme drought conditions in the past two years.

- Agriculture Disaster Designations in 2023 and 2024



16

MEDIUM RISK

Sinkholes

Sinkholes are geological hazards that are natural depressions of the land surface specifically bowl-shaped, funnel-shaped, or vertical sided, formed when the land surface sinks or collapses due to soluble rock underneath dissolving.

Findings:

Much of the inhabitable part of the Valley is karst topography and susceptible to sinkholes.

Known sinkholes are densest around Lexington and the area north of Harrisonburg.

In recent years, sinkholes have affected roads, dams, stormwater and water infrastructure in the region.

Existing datasets and actions are reactionary.

17

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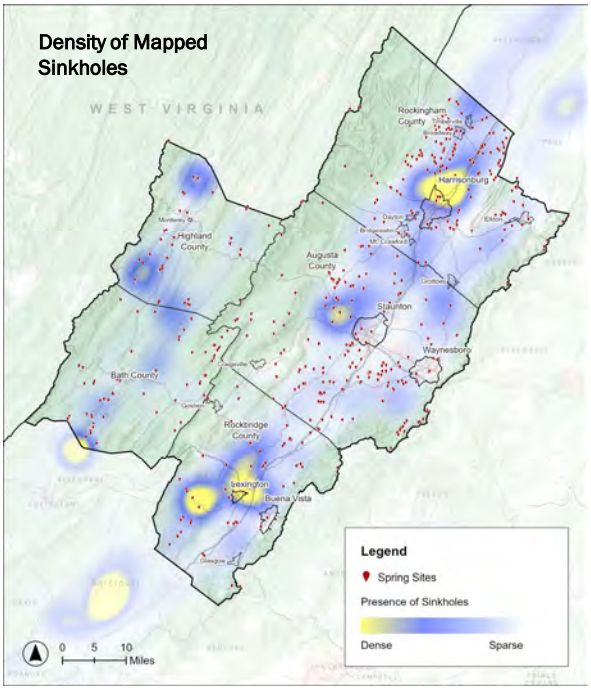


18

MEDIUM RISK

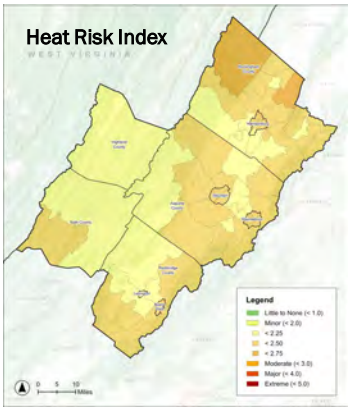
Extreme Temperatures

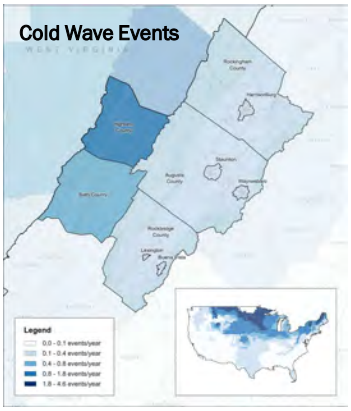
Extreme heat is defined as a period of high heat and humidity with temperatures above 90°F for at least 2-3 days. Extreme cold is defined as temperatures at or below normal conditions for the region and considers wind chill temperatures.

Findings:

The Region has minor to moderate Heat Risk (CDC).

Highland and Bath are estimated to experience more cold wave events annually than the other localities.





19

MEDIUM RISK

Infectious Disease Outbreak

A biological disease outbreak in excess of normal expectancy; includes epidemics and pandemics.

Findings:

According to COVID data (2022), during the pandemic, Lexington had the highest ratio of reported cases to its population, followed by Buena Vista and Harrisonburg.

It is estimated that at the height of the COVID pandemic the regional GDP dropped by $315 million.

Higher risk to our Region are infectious disease outbreaks among livestock.

Some facilities in the region are already equipped with personal protective equipment (PPE) or serve as centers for pharmaceutical distribution in an outbreak crisis.

20

MEDIUM RISK

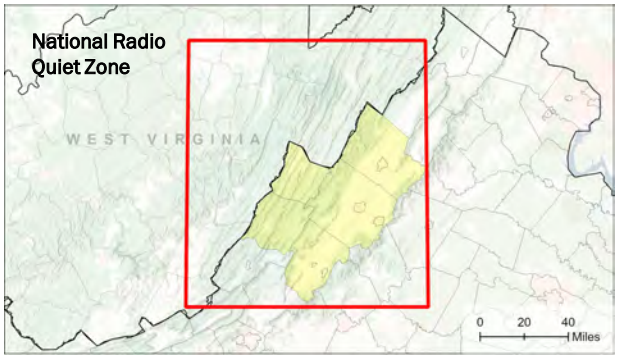
Utility / Infrastructure Failure

The loss of physical systems that a community or organization uses to provide critical and/or life safety services. This may include large-scale utility outage/interruption in the form of electricity, gas, water, or telecommunication networks because of a technical or mechanical issue.

Findings:

Infrastructure in the region is more vulnerable due to karst topography, particularly roads.

The region is uniquely challenged by National Radio Quiet Zone restrictions.



21

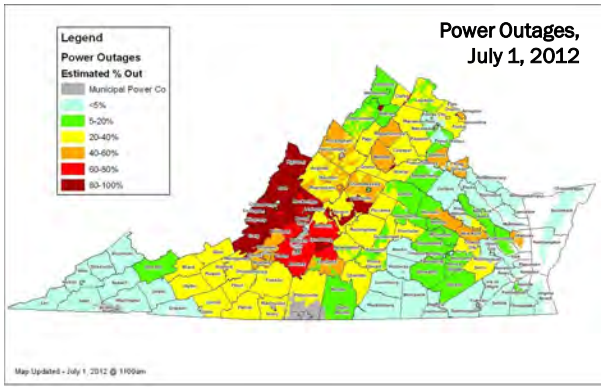
LOW RISK

High Winds

Sustained winds greater than 40 miles per hour (mph) or gusts of 58 mph or greater; not associated with a tornado, tropical storm, or hurricane. (i.e. straight-line winds)

Findings:

The Region is estimated to have 2-4 strong wind events per year. The last major non-tornadic, non-tropical storm wind event was the 2012 Derecho.



22

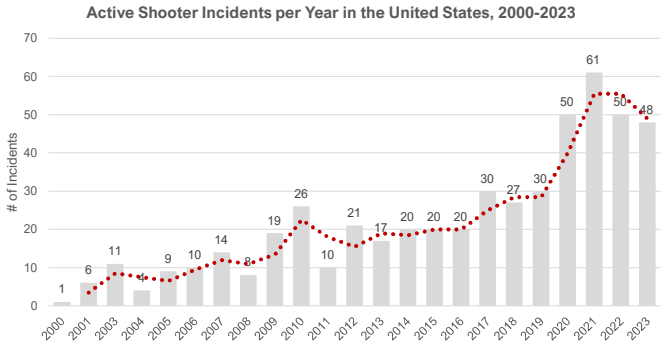
LOW RISK

Active Assailant

A physical assault, by 1 or more individuals, with the intent of inflicting serious harm and/or deadly force on others in a confined and/or populated area.

Findings:

2022: Two incidents in the region, one in Harrisonburg, resulting in 8 injuries, and another in Bridgewater, resulting in 2 deaths.



23

Risk = Impact x Probability

Risk Rating

HIGH	MEDIUM	LOW
• Flooding • Wildfire • Severe Winter Weather • Hazardous Materials Release	• Hurricanes* • Drought • Sinkholes • Extreme Temperatures • Infectious Disease Outbreak • Utility/Infrastructure Failure	• High Winds • Active Assailant

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Themes from Locality Meetings

- Desire for Improved Data & Studies
- Desire for Enhanced Monitoring of Events
- Concern for Livestock and Pets

25

Themes from Locality Meetings

- Aging Infrastructure & Critical Facilities
- Communications Challenge due to NRQZ
- Dynamic of I-81 and Route 11 during Hazardous Events

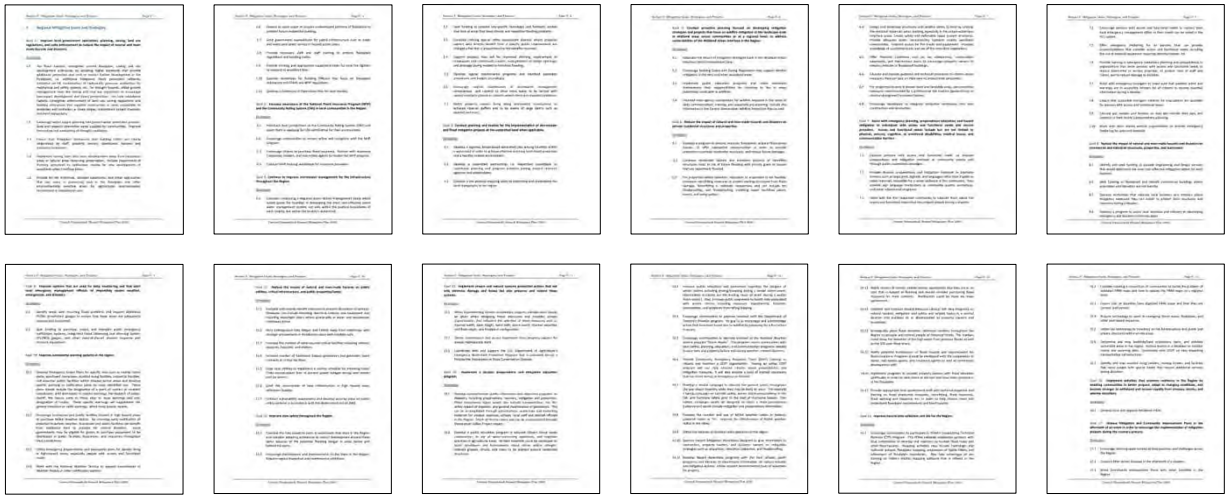
26



10 Minute Break

27

Previous Regional Goals & Strategies



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Updates to Regional Goals & Strategies

The CSPDC reviewed existing language (keep, merge, remove)

The CSPDC streamlined language into a new framework

Together, we are reviewing the framework and editing draft language

29

Regional Vision Statement

GOALS	Economic Resilience & Protection	Housing & Neighborhood Protection	Environmental Stewardship & Natural Hazard Mitigation	Resilient Public Infrastructure	Public Health & Safety Enhancement	Regional Collaboration & Innovation
STRATEGIES	Local Planning & Regulation	Local Planning & Regulation	Local Planning & Regulation	Local Planning & Regulation	Local Planning & Regulation	Local Planning & Regulation
	Structure & Infrastructure Projects	Structure & Infrastructure Projects	Structure & Infrastructure Projects	Structure & Infrastructure Projects	Structure & Infrastructure Projects	Structure & Infrastructure Projects
	Natural Systems Protection	Natural Systems Protection	Natural Systems Protection	Natural Systems Protection	Natural Systems Protection	Natural Systems Protection
	Education & Awareness	Education & Awareness	Education & Awareness	Education & Awareness	Education & Awareness	Education & Awareness

30

Strategy Categories

Local Planning & Regulation	Structure & Infrastructure	Natural Systems Protection	Education & Awareness
• Plans, Ordinances • Review Processes • Building Codes • Capital Improvement Programs • Procedures	• Acquisition, Elevation, Demolition • Retrofitting • Stormwater, Culverts • Safe Rooms	• Erosion Control • Stream Restoration • Conservation Easements • Vegetation Management	• Radio/TV Spots • Social Media Outreach • Websites • Real Estate Disclosure • Trainings

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Proposed Vision Statement

The Central Shenandoah region envisions a resilient future built on collaborative planning, innovative solutions, and sustainable practices. By proactively addressing natural and human-caused hazards, we not only aim to protect our residents, businesses, and visitors but also to preserve the region's natural beauty, agricultural heritage, and economic vitality for generations to come.

32

Proposed Goals

Regional Goal #1: Economic Resilience and Protection

Bolster the regional economy by reducing the impact of natural and man-made hazards on major economic sectors, commercial centers, industrial facilities, and critical business infrastructure.

33

Proposed Goals

Regional Goal #2: Housing and Neighborhood Protection

Protect residential properties and prioritize the safety of vulnerable neighborhoods and housing populations.

34

Proposed Goals

Regional Goal #3: Environmental Stewardship and Natural Hazard Mitigation

Restore and enhance the hazard-mitigation function of natural systems while protecting environmental resources that reduce community risk.

35

Proposed Goals

Regional Goal #4: Resilient Public Infrastructure

Ensure communities have high-quality, resilient infrastructure that reduces risk and maintains essential services during and after hazard events.

36

Proposed Goals

Regional Goal #5: Public Health and Safety Enhancement

Promote public health and safety by reducing hazard-related risks to community well-being and ensuring effective emergency response capabilities.

37

Proposed Goals

Regional Goal #6: Regional Collaboration and Innovation

Collaborate across jurisdictions and sectors to efficiently and cost-effectively improve the lives of residents through innovative hazard mitigation approaches.

38



Break for Activity

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Next Steps

I. Finalizing the HMP
   - Refinement of Regional Strategies and Action Items
   - Finalization of Local Strategies
   - Plan Maintenance

II. FEMA/VDEM Approval

III. Local Adoption
   - All localities will need to adopt the HMP
   - At least one locality must adopt by **May 6, 2026**

IV. Annual Hazard Mitigation Plan Reviews

40

Celebrating 55 Years

CSPDC

Central Shenandoah Planning District Commission

SIGN-IN SHEET

CSHMP Steering Committee Meeting #4

August 8, 2025 at 9:30 AM

NAME	AFFILIATION	EMAIL	PHONE
Bill Rees	SVEC	brees@svec.coop	540-478-3042
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Melissa Alexander	Rockbridge PSA	malexander@rockbridgecountyva.gov	540-463-4329
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Paul Kastner	VMI	Kastnerpt@vmi.edu	540 784 6197
Olivia Wright	SVP	owright@theshenandoahvalley.com	540 394 8001
Cole A. Taggart	VDem	Cole.Taggart@vdem.virginia.gov	804 659 0249
Alex Wilmer	Town of Bridgewater	awilmer@bridgewater.va	540-908-4212

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CSHMP Steering Committee Meeting #4

August 8, 2025 at 9:30 AM

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Patrick Lam	Augusta County EM	Plam@~~augus~~Co.Augusta.VA.US	540 480 3939
~~Nat Sellers~~	A		
Allyson Finchum	Town of Glasgow	townmanager@glasgowvirginia.org	
Gene Stewart	VDEM	gene.stewart@vdem.virginia.gov	540-383-5126

Celebrating 55 Years

CSPDC

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August 8, 2025 at 9:30 AM

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Gary Carter	Waynesboro DEM	carterg@ci.waynesboro.va.us	5402412298
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WILLIAM JOHNSON	MAURY SERVICE AUTHORITY	W.JOHNSON@MSAPLANT.ORG	540-784-8486
Brad Zollman	Rockbridge County	bzollman@rockbridgecountyva.gov	540-319-9878
Jordan Good	Central Shenandoah Health District	jordan.good@vdh.virginia.gov	540-290-4100
Michelle Blumling	Harrisonburg-Rockingham CSB	mblumling@hrcsb.org	(540)438-7113
Neal Dillard	Mt. Crawford	nealdillard@verizon.net	703 314 9351

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