



Appendix A: Adoption Resolutions

Appendix A: Adoption Resolutions

Placeholder for Adoption Resolutions



Appendix B: FEMA Crosswalk

Appendix B: FEMA Crosswalk

REGULATION CHECKLIST	CROSSWALK REFERENCE #
ELEMENT A. PLANNING PROCESS	
A1. Does the Plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement §201.6(c)(1))	Section 3: Planning Process
A2. Does the Plan document an opportunity for neighboring communities local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development as well as other interests to be involved in the planning process? (Requirement §201.6(b)(2))	Section 3.6: Coordination with other Agencies, Entities, and Plans
A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))	Section 3.7: Public Involvement
A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information (Requirement §201.6(b)(3))	5.3: Planning Capabilities, 6.0: Mitigation, 7.2: Plan Integration and Implementation
A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process (Requirement §201.6(c)(4)(iii))	7.4: Public Involvement
A6. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a 5-year cycle)? (Requirement 201.6(c)(4)(i))	7.3: Evaluating and Updating
ELEMENT B. HAZARD IDENTIFICATION AND RISK ASSESSMENT	
B1. Does the Plan include a description of the type, location, and extent of all natural hazards that can affect each jurisdiction(s)? (Requirement §201.6(c)(2)(i))	4.0: Hazard Identification and Risk Assessment
B2. Does the Plan include information on previous occurrences of hazard events and on the probability of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))	4.0: Hazard Identification and Risk Assessment
B3. Is there a description of each identified hazard's impact on the community as well as an overall summary of the community's vulnerability for each jurisdiction? (Requirement §201.6(c)(2)(ii))	4.0: Hazard Identification and Risk Assessment
ELEMENT C. MITIGATION STRATEGY	
C1. Does the Plan document each jurisdiction's existing authorities, policies, programs, and resources and its ability to expand on and improve these existing policies and programs? (Requirement §201.6(c)(3))	5.0: Capabilities
C2. Does the Plan address each jurisdiction's participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(ii))	5.3.11: Floodplain Management



Appendix B: FEMA Crosswalk

REGULATION CHECKLIST	CROSSWALK REFERENCE #
C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement §201.6(c)(3)(i))	6.4: Mitigation Goals, Objectives, and Actions
C4. Does the Plan identify and analyze a comprehensive range of specific mitigation actions and projects for each jurisdiction being considered to reduce the effects of hazards, with emphasis on new and existing buildings and infrastructure? (Requirement §201.6(c)(3)(ii))	6.5: Jurisdiction-Specific Mitigation Actions, 6.6 Mitigation Analysis Techniques
C5. Does the Plan contain an action plan that describes how the actions identified will be prioritized (including cost benefit review), implemented, and administered by each jurisdiction? (Requirement 201.6(c)(3)(iv)); (Requirement 201.6(c)(3)(iii))	6.5: Jurisdiction-Specific Mitigation Actions, 6.6 Mitigation Analysis Techniques
C6. Does the Plan describe a process by which local governments will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate? (Requirement 201.6(c)(4)(ii))	7.2: Plan Integration and Implementation
ELEMENT D. PLAN REVIEW, EVALUATION, AND IMPLEMENTATION	
D1. Was the Plan revised to reflect changes in development? (Requirement §201.6(d)(3))	2.6.4: Development Trends
D2. Was the Plan revised to reflect progress in local mitigation efforts? (Requirement §201.6(d)(3))	6.0: Mitigation
D3. Was the Plan revised to reflect changes in priorities? (Requirement §201.6(d)(3))	6.0: Mitigation
ELEMENT D - CHANGES FROM THE CROSSWALK	
ELEMENT E. PLAN ADOPTION	
E1. Does the Plan include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval? (Requirement §201.6(c)(5))	Appendix A
E2. For multi-jurisdictional plans, has each jurisdiction requesting approval of the plan documented formal plan adoption? (Requirement §201.6(c)(5))	Appendix A



Appendix C: Acronyms

Appendix C: Acronyms

AAL – Average Annual Loss

AEL – Annualized Earthquake Loss

AM&O – Atlantic, Mississippi, and Ohio Railroad

ASCE – American Society of Civil Engineers

ASDSO – Association of State Dam Safety Officials

BFE – Base Flood Elevation

BRIC – Building Resilient Infrastructure and Communities Program

CDBG – Community Development Block Grant Program

CDC – Centers for Disease Control

CERT – Community Emergency Response Team

CFM – Certified Floodplain Manager

CGIT – Center for Geospatial Information Technology

CIP – Capital Improvement Plan

CME – Coronal Mass Ejections

COG – Continuity of Government Plan

COOP – Continuity of Operations Plan

CRS – Community Rating System

CVPDC – Central Virginia Planning District Commission

CVSZ – Central Virginia Seismic Zone

CWA – Clean Water Act Section 319 Grants

CWSRF – Clean Water Revolving Fund

DBIZ – Dam Break Inundation Zone

DCR – Virginia Department of Conservation and Recreation

DEQ – Virginia Department of Environmental Quality

DEM – Digital Elevation Model

DGMR – Division of Geology and Mineral Resources (Virginia DMME)

DHCD – Virginia Department of Housing & Community Development

DHS – U.S. Department of Homeland Security

DMA 2000 or DMA2K – Disaster Mitigation Act of 2000

CVPDC Hazard Mitigation Plan 2020 Update



Appendix C: Acronyms

DMME – Virginia Department of Mines, Minerals & Energy
DMTF - Virginia Drought Monitoring Task Force
DPW – Department of Public Works
DSCI – Drought Severity and Coverage Index
DSCOVr – Deep Space Climate Observatory
DSIS – Virginia Dam Safety Inventory System
DWSRF – Drinking Water State Revolving Fund
EAP – Emergency Action Plan
EDA – Economic Development Administration
EF – Enhanced Fujita (Tornado Scale)
EHS – Extremely Hazardous Substances
EOC – Emergency Operations Center
EOP – Emergency Operations Plan
EPA – U.S. Environmental Protection Agency
EPCRA - Emergency Planning and Community Right to Know Act
EPP – Emergency Preparedness Plan
ER – Emergency Relief
ETO – Emergency Transportation Operations
ETSZ – Eastern Tennessee Seismic Zone
EUV – Extreme Ultraviolet
EVA – Extra-Vehicular Activity
EWP – Emergency Watershed Protection
FEMA – Federal Emergency Management Agency
FFH – First Floor Height
FHWA – Federal Highway Administration
FIRM – Flood Insurance Rate Map
FMA – Flood Mitigation Assistance Program
GCSZ – Giles County Seismic Zone
GFDL – Geophysical Fluid Dynamics Laboratory
GIC – Geo-magnetically Induced Currents
GIS – Geographical Information System



Appendix C: Acronyms

GNSS – Global Navigation Satellite Systems
GPS – Global Positioning System
Hazmat – Hazardous Material
HF – High Frequency
HFLC – Hurricane-Flood-Landslide Continuum
HIFLD – Homeland Infrastructure Foundation-Level Data
HIRA – Hazard Identification Risk Assessment
HMGP – Hazard Mitigation Grant Program
HMP – Hazard Mitigation Plan
HUD – U.S. Department of Housing and Urban Development
ICS – Industrial Control System
IED – Improvised Explosive Device
IMF – Interplanetary Magnetic Field
KBDI – Keetch-Byram Drought Index
LWCF – Land and Water Conservation Fund Grants
MH – Manufactured Housing
MMI – Modified Mercalli Intensity
MPO – Metropolitan Planning Organization
MRLC – Multi-Resolution Land Characteristics
MSA – Metropolitan Statistical Area
NAS – National Academy of Sciences
NESIS – Northeast Snowfall Impact Scale
NCDC – National Climatic Data Center
NCEI – National Centers for Environmental Information
NESIS – Northeast Snowfall Impact Scale
NF – Nuisance Flooding
NFHL – National Flood Hazard Layer
NFIP – National Flood Insurance Program
NFIRS – National Fire Incident Reporting System
NFPA – National Fire Protection Association
NLCD – National Land Cover Database



Appendix C: Acronyms

NLDAS – North America Land Data Assimilation System

NOAA – National Oceanic Atmospheric Administration

NTAS – National Terrorism Advisory System

NWS – National Weather Service

ORNL – Oak Ridge National Laboratory

PCB – Polychlorinated Biphenyl

PDC – Planning District Commission

PDM – Pre-Disaster Mitigation Program

PDSI – Palmer Drought Severity Index

PGA – Peak Ground Acceleration

PMF – Probable Maximum Flood

PRD-UDI - Preliminary Regulatory Determination/Unknown Dam Initiative

QCEW – Quarterly Census of Employment and Wages

Risk MAP – FEMA Risk Mapping, Assessment, and Planning

RL – Repetitive [flood] Loss

RMA – Resource Management Area

RPA – Resource Protection Area

RFC – Repetitive Flood Claims Program

SARA - Superfund Amendments and Reauthorization Act

SBA – Small Business Administration

SCADA – Supervisory Control and Data Acquisition

SFCP – Small Flood Control Projects

SFHA – Special Flood Hazard Area

SRL – Severe Repetitive [flood] Loss

STAPLEE – Social, Technical, Administrative, Political, Legal, Economic, and Environmental

SWPC – Space Weather Prediction Center

TAC – Technical Advisory Committee

TAZ – Traffic Analysis Zones

TRI – Toxic Release Inventory

UC – Urban Cluster

USACE – U.S. Army Corps of Engineers



Appendix C: Acronyms

USBC - Virginia Uniform Statewide Building Code

USDA – United States Department of Agriculture

USDM – United States Drought Monitor

USDOT – United States Department of Transportation

USGS – United States Geological Survey

VDEM – Virginia Department of Emergency Management

VDEQ – Virginia Department of Environmental Quality

VDH – Virginia Department of Health

VDOF – Virginia Department of Forestry

VDOT – Virginia Department of Transportation

VFSR – Virginia Fire Safety Regulations

VGIN – Virginia Geographic Information Network

WHC – Woodland Home Communities

WHO – World Health Organization

WHP – Wildfire Hazard Potential

WMO – World Meteorological Organization

WONDER – Wide-ranging Online Data for Epidemiologic Research

WSAG – Water Supply Assistance Grant

WUI – Wildland-Urban Interface



Appendix D: Meeting Documentation

Appendix D: Meeting Documentation

The regional pre-hazard mitigation plan development included steering committee meetings, individual locality stakeholder meetings, community meetings. Plan development also included public input through public meetings, through an administered public survey, and information through policy board meeting. Throughout the planning process there were also individual conversations with extension agents, economic development, and locality staff regarding specific need evaluation for mitigation strategy development.

PROJECT DEVELOPMENT MEETINGS

Steering Committee Meetings

June 14, 2018 | [Meeting Summary](#); [Sign in Sheet](#)

January 22, 2019 | [Meeting Summary](#); [Sign in Sheet](#)

October 17, 2019 | [Meeting Summary](#); [Sign in Sheet](#)

November 21, 2019 | [Agenda](#)

April 16, 2020 | [Meeting Summary](#); [Attendees](#)

May 28, 2020 | [Meeting Summary](#); [Attendees](#)

August 19, 2020 | [Meeting Summary](#); [Attendees](#)

Locality & Stakeholder Meetings

Local Emergency Planning Committee (LEPC) Meeting | January 15, 2020; [Minutes](#); [Sign in Sheet](#)

Locality Vulnerability Meeting: Amherst | January 19, 2020; [Minutes](#); [Attendees](#)

Locality Vulnerability Meeting: Campbell | February 18, 2020; [Minutes](#); [Attendees](#)

Locality Vulnerability Meeting: Appomattox | February 18, 2020; [Minutes](#); [Attendees](#)

Locality Vulnerability Meeting: Lynchburg | February 19, 2020; [Minutes](#); [Attendees](#)

Locality Vulnerability Meeting: Bedford | March 9, 2020; [Minutes](#); [Attendees](#)

PUBLIC INPUT & PARTICIPATION

Public Meeting

December 4, 2019 | 5:30 pm – 7:00 pm

The Miller Center

301 Grove Street, Lynchburg

[Presentation Link](#)

[Attendees](#)

Public Meeting (webinar format)

June 25, 2020 | 5:30 pm

[Presentation Link](#)

Public Survey

The regional pre-disaster public survey was open and electronically available from November 20 – December 13, 2019. Information about and a direct link to the survey was made available on all the locality websites, the CVPDC website, via the CVPDC newsletter, social media, and through information provided to all of the local news outlets including regional newspapers and radio. In addition, information



Appendix D: Meeting Documentation

regarding the December 4, 2019 public meeting and pre-disaster survey was provided as an informational item at each locality November policy board meeting.

[CVPDC Pre-Disaster Mitigation Plan Public Survey](#)

[CVPDC Pre-Disaster Mitigation Plan Public Survey Results](#)



Appendix D: Meeting Documentation

Region 2000 Hazard Mitigation Plan Update

Project Kickoff Meeting

Region 2000 Local Government Council Office

828 Main Street; 12th Floor, Lynchburg

Thursday, June 14, 2018

9:30 – 11:30 am

Meeting Agenda

1. Welcome Kelly Hitchcock
2. Introductions
3. Hazard Mitigation Planning – Role & Value Christopher Bruce, VDEM
4. 2013 Region 2000 Hazard Mitigation Plan – History/Status Peter Sforza, VT CGIT
5. Hazard Planning – Coordination with Economic Development Peter Sforza
6. Hazards Review & Discussion
7. Hazard Mitigation Plan Update Process Peter Sforza, VT CGIT
8. Hazard Mitigation Plan Proposed Schedule CGIT Team
9. Next Steps

Region 2000 Hazard Mitigation Plan Update

Kickoff Meeting, June 14, 2018

Minutes of Meeting

Kelly Hitchcock, Region 2000 Local Government Council

- Introductions (CGIT) and other attendees

Peter Sforza, CGIT VT

- Team Introductions

Christopher Bruce, VDEM

- What is the current applicability of the previous mitigation projects? New projects to be considered
 - Involvement of the localities in the meetings and in the process
 - Types of Hazard Mitigation Grants
 - **HMGP - After disasters**
 - These grants are provided to states and local governments to implement long term mitigation measures after major disaster declarations
 - The applicability of this grant is statewide
 - Hence, when Hurricane Matthew (FEMA) received federal declaration 2 years ago, all communities were eligible to apply for the grant
 - It was not just for Hampton Roads, the approval was statewide
 - Everyone has to apply for same amount of money it's not just the affected localities
 - e.g. Central Shenandoah PDC - planning grant after Hurricane Matthew
 - **Flood Mitigation Assistance Grant**
 - Same places are flooded repetitively
 - Hard to implement mitigation measures for tornado as compared to flooding (NFIP) and stormwater
 - **Types of Pre disaster mitigation grants**
 - 2017-2018 funding for the statewide and nationwide explained



Appendix D: Meeting Documentation

- Types of mitigation strategies:
 - Flood diversion
 - Floodplain and stream restoration - to channel flood flow, Albemarle County has a couple of projects done recently
 - Water and Sewer protection
 - Infrastructure and Utility protection - Roadways, Critical Infrastructure
 - Soil stabilization – Erosion
 - Green Infrastructure purchasing houses and turning into green spaces
 - Acquire Management - mostly for drought management
 - Wildfire - education services, *Central Shenandoah* has a *wildfire mitigation plan* separate from their HMP
 - Flood Proofing - structures in Stanton to keep water out
 - Elevations - above 100 yr flood plains (Hampton Roads)
 - Acquisitions (FEMA grants) to move people out of the hazards way. Deed restricted and converted to open spaces
 - Structure Relocation - Moving the complete structure to a new place. At Least 50% of the property has to have suffered severe loss (Repetitive flood Loss)
 - Safe Rooms - for protection from tornadoes, storms
 - Purchase of generators
 - Retrofitting properties to withstand hurricane wind loads
- **Previous HMP grants in Virginia**
 - Elevations, Acquisitions, Plan Updates appear to be the most commonly used grants
 - It is easier to approve grants when a hazard mitigation plan has a number of them and they are well explained

Peter Sforza

- **Center for Geospatial Information Technology, Virginia Tech – Introduction**
 - Past and ongoing projects
 - Services provided
- **Hazard Mitigation Planning stages**
 - Step one will be to identify risks in the region - this will be done through quantitative and qualitative assessments of hazards and vulnerabilities (*CGIT*)
 - Step two will be deciding strategies to mitigate hazards
 - Approvals by VDEM, FEMA, Localities
 - Application by the localities
- **New Innovative Ideas in the plan update**
 - Open to suggestions
 - Plan to involve a research element focusing on the economic development/growth of the region
 - To attract new businesses (*e.g. Northern Virginia HMP*)
 - Work in collaboration with Kelly for the economic growth aspect
- **Related Studies/documents**
 - Previous Region 2000 HMP
 - Statewide Hazard Mitigation Plan
 - Central Shenandoah Wildfire Management Plan



Appendix D: Meeting Documentation

- *Flood Hazard Study for Lynchburg (Link to the plan to be provided by the Lynchburg representative)*
 - HMPs for colleges and universities in region 2000
- **Case Studies**
 - List of hazards affecting Region 2000 between 2012 to present, is prepared by CGIT
 - Feedback from the localities to ensure the comprehensiveness of the list
- **Timeline**
 - Webinars and in person meetings to discuss the progress
 - 2019
 - Complete HIRA by April
 - Big projects? - New mitigation strategies
 - Assessment and rankings
 - Public engagement (Newspapers, public hearings, websites – online surveys) - e.g. *Hampton Roads Mitigation Plan*
 - Completion in 2020
 - VDEM, FEMA Reviews
 - Dec - adaptation of the plan
- **Integration of GIS**
 - Inventory analysis
 - Probability of occurrence, quantitative analysis
 - Classification of hazards as low medium or high risk (Drought vs hurricane)
 - This will be based on inputs from stakeholders, public and geospatial analysis
 - Identify other databases to be used
 - Insurance claims data (e.g. *Virginia Tech HMP*)
 - Karst, sinkholes dataset
 - Modeling damage to buildings situated in the floodplains using HAZUS level 2 i.e. building level data
- **Technical Advisory Groups – Expectations**
 - *Worksheet circulated*
 - Technical advisory committees consisting of representatives from the localities and agencies to be formed
 - Their expertise related to a particular hazard will be used in the plan update process
 - In later stages of the plan - help with goals and strategies
 - Involvement of universities, colleges, CENTRA health etc.
 - *Suggestions for any other institutions to be involved ??*
 - Help in writing grants
 - Technical feedback
- **HAZUS**
 - Will be used for quantitative hazard risk analysis
 - Level 2 - detailed building inventory
 - Integration of State Level Property assessments database, state properties
 - Need to acquire local r2k data
- **HIRA**
 - Coordination with Kelly and VDEM throughout the process
 - Inputs from localities and other stakeholders involved in the process
 - Identify hazards across the region
 - Assess the vulnerability



Appendix D: Meeting Documentation

- **New hazards to be considered for possible inclusion**
 - Communicable diseases (Human, animal, plants) - Virginia Tech research group
 - Flu analysis
 - Thunderstorm, lightning
 - Energy grid knockouts because of solar flares
 - Nanotoxicity (*VT hazard mitigation plan*)
 - HazMat
 - Social Vulnerability
 - Transmission pipelines data intersected with landslides
- **Overview of the Hazards and analysis methods**
- **New Elements Planned**
 - Use of Property Assessments Data
 - Transmission pipeline data
 - Web portal to engage stakeholders, post the results of HIRA and get feedbacks, web based surveys
- **Hazard Risk Prioritization**
 - Semi-quantitative ranking system to prioritize hazards
 - Technical Advisory Committee meetings dates will be decided later

Kelly

- Integration of web portal will ensure continued and efficient inputs
- Each locality in region 2000 might have unique needs. Through this process we'll try to pull it all together
- Christopher and Jonathan from VDEM will be involved throughout the process

Suggestions

- Grants/ Funding for backup generators (Could be a mitigation project)
- Current situation - 1 backup generator, 15-20 yrs old at most of the places

Christopher

- FEMA requires the locality involvement/information to be documented properly even if the small towns are represented by their counties
- Final Project Timeline Revision pending



Appendix D: Meeting Documentation

Hazard Mitigation Plan Update
Kickoff Meeting - June 14, 2018
Attendance Sheet

Name	Title	Locality and/or Organization
Sony Orbay	Local Health ^{Coordinator} Emergency	CVHD / VDEM
JEFF MARTIN	Assistant Director	LYN. WATER RESOURCES
Chad Nease	Planner/GIS	SPDC
Jack Jones Jr	Chief of Dept H&A	Bedford County
Anne Witt	Geohazards Geologist	VA DIME
J. MIKE CREWS	Director of Public Works	TOWN OF BROOKNEAL
PHIL HYSEL	WARNING COORDINATION DETERMINATION	NWS KENNESAW
MIRA SIMPSON	Deputy Director of Public Safety	CAMPBELL CO.
JONATHAN EVANS	Comm. Tech	CAMPBELL CO.
Piper VanDePerre	Emergency Programs Specialist	Lynchburg Emergency Services
Chris Bruce	PLANNER -	VOEM
Johnnie Reark	Director of Community Development	Appomattox County
Melissa Foster	Director of Emergency Services	City of Lynchburg
BETH LOHMAN	LAND PROTECTION PROGRAM MGR	DEQ-BR20
Dan Witt	Asst. Town Mayor	Town of Albemarle
Bobby Wierlick	Public Safety Director	Appomattox Co.
Jennifer Maul	Deputy Director	Lynchburg Emergency Services
Jonathan T. Simmons	Regional Planner	VOEM Region 6
Peter Sforza	Director, CGIT Virginia Tech	Virginia Tech CGIT
Aishwarya B Borake	Grad student, Virginia Tech Intern, CGIT	Virginia Tech



Appendix D: Meeting Documentation

Meeting Name:

Region 2000 Hazard Mitigation Plan Update Meeting

Location and Date:

GLTC Transfer Center Community Room,
800 Kemper Street, Lynchburg, VA
Tuesday, January 22, 2019 10:00 am – 1:00 pm

Agenda

1. Hazard Mitigation Planning Process
2. Region 2000 Community Profile
 - Methods and Data Source
 - Updates Summary
 - Community Profiles
 - Land Cover
 - Watershed
 - Demographics
 - Higher Education
 - Population Projection
 - Zoning and Land uses
3. Hazard Identification and Risk Assessment (HIRA)
 - Proposed methods and data source
 - Proposed updates
4. Capability Assessment
5. Hazard Prioritization

Region 2000 Hazard Mitigation Plan Update Kickoff Meeting, January 22, 2019 Minutes of Meeting

- Introductions
- Regional Mitigation Plan Development Overview
 - Timeline
 - CRS Program Coordination
- VDEM News
- Overview & Discussion Draft Community Profile
- Hazard Identification and Risk Analysis
 - Review data and methods
 - Consensus on Hazard Types
- Individual Hazard Meetings Kelly Hitchcock
 - Meeting Schedules
 - Stakeholder
- Summary of Next Steps



Appendix D: Meeting Documentation

Hazard Mitigation Plan Update

January 22, 2019

Attendance Sheet

Name	Title	Locality and/or Organization
Brittany Powell	VDH/LHEC	VDH
Anno Witt	VA DHE Geologist	VA DHE
Johanne Roark	Director Comm. Dev.	Appomattox County
Bobby Wingfield	Public Safety Director	Appomattox County
Jonathan T. Simmons	Regional Planner	VDEM RG
Lauren Pillow	Hazardous Waste Inspector	VADEQ
J. MICHAEL CREWS	PUBLIC WORKS DIRECTOR	TOWN OF BROOKNEAL
Tracy Fairchild	Public Safety Director	Campbell Co.
Myra Simpson	Deputy Director	Campbell County Public Safety
Alan Belcher	Director, Ambassador Services	Centra Health, Inc.
Byron Byrd	Lieutenant	Bedford Co. Dept. Fire & Rescue
Jackie L. Jones, Jr.	Chief of Dept / Eng. Capt	Bedford County Va - Dept of Fire & Rescue
Clay Ross	Natural Resources Specialist	Bedford County
Chris Bruce	VDEM PLANNING	VDEM
Jennifer Maul	Deputy Director	City of Lynchburg
Philipp Garbathuber	Senior Planner	Pg Region 2000/CVPDC
Jeff Martin		
JEFF MARTIN	ASSISTANT DIRECTOR WATER RESOURCES	Lynchburg Water Resources
Erin Hawkins	Water Quality Manager	City of Lynchburg, Water Resources
GARY SIMMONS	TOWNSHIP MANAGER	APPOMATTOX



Appendix D: Meeting Documentation

Hazard Mitigation Plan Update
January 22, 2019
Attendance Sheet

Name	Title	Locality and/or Organization
Kelly Hitchcock	Planning & Research Director Region 2000 (PDC #11)	→
Peter Sforza	Director	Virginia Tech CGIT
Haitao Wang	Research Associate	Virginia Tech CGIT
Aishwarya Borocho	Hazard Mitigation Analyst	Virginia Tech CGIT



Appendix D: Meeting Documentation

Meeting Name:

CVPDC Hazard Mitigation Plan Update Meeting

Location and Date:

GLTC Transfer Center Community Room,
800 Kemper Street, Lynchburg, VA
Thursday, October 17, 2019 3:00 am – 4:30 pm

Agenda

1. Draft HIRA Chapter – Comments
2. Review Technological Hazard Data
3. Mitigation Project Identification
4. Public Outreach
 - Public Meeting
 - Citizen Survey
 - Website
5. Confirmation Next Steps

Mitigation Strategies

Education/Outreach:

- Awareness of hazards & encourage safe actions to mitigate impacts.
- Educate for disaster preparedness (public, agencies, staff); include high water crossing, river use, response protocol, preparedness kits
- Support development of emergency plans for large employers/industries

Response/Access:

- Access to sensitive communities (access, identification, transport, uniform messaging)
- Readiness/needs of shelters

Capacity (Programs):

- Zoning, area stormwater plans/studies, targeted demolition
- Coordination among departments/programs
- Identification of additional staff, programs

Information & Data Development:

- Critical facility disaster plans (develop, maintain)
- Security and backup for communication network
- Identification, capacity to address gaps

Impact Protection

- Minimize economic loss/risks of drought (public system access, vulnerability studies, capacity, restrictions, agriculture/SWCDs/NRCS)
- Reduce impacts increasing 90-degree days/periods



Appendix D: Meeting Documentation

- Wildfire mitigation (Firewise, defensive space, hazardous materials, fireresistant building materials)
- Protect Natural systems – streambank stabilization,

Infrastructure (buildings):

Repetitive loss structures/zones

- Identification of elevate, relocate, acquire, demolish opportunities - storage zones
- Retrofit needs – green infrastructure, coordination with roadway/infrastructure upgrades

Critical Facilities

- Shelter needs – supplies, access, retrofit needs
- Emergency plans
- Water/wastewater facilities – at site, lines/distribution, backup/pumps, plans
- Water Towers – protection (fencing, stormwater retrofits)
- Powerlines – street tree clearance,

Community/Transportation

- Access – routing (flood zones),
- Green Infrastructure – stormwater retrofits
- Movement – connectivity, clearance (street trees)
- Drainage improvements
- Flooding warning signs, establish alternative routes, highwater mark marking



Appendix D: Meeting Documentation

CVPDC Hazard Mitigation Plan Update
October 17, 2019

Attendance Sheet – Please Print

Name	Title	Locality or Organization	Email
Bob Hopkins	Director of Public Utilities	Amherst County Service Authority	rhopkins@acsava.com 434-221-8757
Piper VanDePerre	Emergency Programs Specialist	City of Lynchburg	piper.vandeperre@lynchburgva.gov 455-3886
Erin Hawkins	Water Quality Mgr.	City of Lynchburg	434-455-3809 erin.hawkins@lynchburgva.gov 455-4258
JEFF MARTIN	Assistant Director	LYN. WATER RESOURCES	JEFFREY.MARTIN@LYNCHBURGVA.GOV
Anne Witt	Hazardous Geologist	VA DMHE	anne.witt@dmhe.virginia.gov
Sara Carter	Town Manager	Town of Amherst	Sara.carter@amherstva.gov
Chris Bruce	PLANNER	VDEM	chris.bruce@vdm.virginia.gov
Myra Simpson	Deputy Director	Campbell County RS	mmsimpson@co.campbell.va.us
JONATHAN EVANS	Comm Tech	CAMPBELL COUNTY RS	JMEVANS@CO.CAMPBELL.VA.US
Jack W. Jones, Jr.	Chief of Dept	Bedford Co F&E	JWJones@bedfordcountyva.gov
Lauren Pillow	Hazardous Waste Inspector	VADEQ	lauren.pillow@deg.virginia.gov

CVPDC Hazard Mitigation Plan Update
October 17, 2019

Attendance Sheet – Please Print

Name	Title	Locality or Organization	Email
J. MICHAEL CREWS	Public Works Director	TOWN OF BROCKNEAL	publicworks@townofbrockneal.com
Thomas W. Fore	Utilities Director	Town of Altavista	twfore@altavistava.gov
Bryan Byrd	Lieutenant/EM	Bedford Co. Fire Rescue	bbyrd@bedfordcountyva.gov
JEFF HURTAK	SERGEANT/POLICE	LIBERTY UNIV. POLICE	LUPDCRIMEPREVENTION@LIBERTY.EDU
Greg Bennett	Director	LU Env. Health & Safety/Emerg. Mgmt.	gbennett1@liberty.edu
Kelly Hotchkiss	Planner	CVPDC	KHotchkiss



Appendix D: Meeting Documentation

CVPDC Hazard Mitigation Plan Update

Project Meeting

GLTC Transfer Center

800 Kemper Street

Thursday, November 21 2019

3:00 – 4:30 pm

Meeting Agenda

1. Review & Discuss Draft Primary Regional Goals
2. Group breakout (by interest/expert area) – Goal Strategies
3. Public Outreach
 - Survey Distribution
 - Public Meeting # 1
 - Approach
 - Presentation
 - Public Meeting(s) #2
 - Approach
 - Timeline/Requirements for individual localities
4. Confirmation Next Activities
5. Next meeting – Thursday, December 19th



Appendix D: Meeting Documentation

CVPDC Hazard Mitigation Plan Update

Project Meeting

April 16, 2020

Web/Go-To-Meeting

3:00 pm – 4:15pm

Agenda

1. Introduction
2. Flood Hazard Chapter Review/Discussion
3. HMP Interactive Mapping Review
4. Dam Hazard Chapter Review/Discussion
5. Review/Confirmation of Follow Up Action Items
6. CVPDC HMP Completion Schedule
7. Next Meeting

Minutes

Introduction

Hitchcock welcomed participants; introductions were made. Bill Bohn, Sobis Inc. and Haitao Wang, VT-CGIT were introduced as the CVPDC HMP developers and would be leading the meeting.

Flood Hazard Chapter Review/Discussion

Bohn provided a summary of the general organization of the Flood Chapter and pointed out, along with Flood/Dam Chapter information review, that a task for the meeting was to receive consensus on the HMP Chapter format as the same format will be used on all of the hazard chapters.

The following reflects key discussion points from the Flood Hazard Chapter review.

- Table 2 - Erin Hawkins suggested a use of consistent dollar amounts, in terms of thousands of dollars or actual dollar amounts, used throughout the document.
- Kristin Owen noted that she will provide updated insurance coverage. Owen noted she does have the capability to differentiate coverage information such that structure and content coverage is available for each locality. Owen will provide the information; team will discuss the best format to present the coverage data within the HMP.
- Bohn provided an overview of the methodology for the flood risk data, the HAZUS level 2 analysis which combines the local parcel data and the building structure footprint data.
- Bohn provided an overview of the noted flood areas, which included FEMA identified and other stormwater areas. Bohn requested that each locality review these maps and provide information on any areas known to have flooding so they could be included in the map.



Appendix D: Meeting Documentation

ACTION: Localities review flood map, provide feedback on any areas missing from the map.

- Bob Hopkins noted that in Table 13 the potable water # was the same for both Appomattox & Amherst counties; suggested to check these #'s.
- Bohn pointed out that Wang had created individual locality dashboard data. Pointed out this is the type of information that the public will most likely pay attention to and will be included within the website and public outreach. Requested review of information, comments.
- Bohn provided an overview of the elements from the Amherst Town/County section and noted that each locality is organized in similar fashion. Proceeded to highlight elements within each of the locality sections.
- Bob Hopkins noted elements from the County are not included within the infrastructure critical facility list. Hopkins noted he has added the comments to a hard copy that will be provided to Hitchcock.
- Sobis reiterated team is requesting Flood/Dam chapter comments by Friday, May 1st.
- Flood-prone roads and bridge summary is provided
- Bohn noted that for each locality a locality-wide vulnerable structures in the floodplain is provided. Also provided are closeup maps in zones with concentrated structures. Bohn reminded participants that more detail from all the maps is available via the interactive maps (details later in the meeting).
- Erin Hawkins suggested for HMP readability that there be more clear section distinction, via font/physical appearance differences, to more easily find sections within chapters that follow the chapter index.
- Kristen Owen questioned the vulnerable structure data sets and reiterated that there be wording to distinguish between vulnerable structures and repetitive loss structures. Ensure the privacy elements for repetitive loss and that there is not confusion in sharing privacy. Recommended making clear statement points are not repetitive loss data.
- Erin questioned the City vulnerable maps and noted structures listed outside flood zone. Bohn confirmed these maps would be updated and currently included the dam inundation areas.

HMP Interactive Mapping Review

Bohn provided an overview of the HMP interactive maps including navigating the GIS layers and individual locality details.

- Hawkins suggested that the orientation of the maps, with readability to be shown in landscape, might be looked into. The map should be positioned in a landscape format so that it is readable on the website.
- Bohn identified the web map tools to add/remove layers, show the legend, identify objects, and change the base map.

Dam Hazard Chapter Review/Discussion

The following reflects key discussion points from the Dam Chapter review.

- Erin Hawkins suggested that a time range be added to the Dam previous occurrence.
- Hopkins suggested rewording the 1st sentence of Previous Occurrences paragraph.
- Jonaanon Evans noted Campbell County was missing from Timberlake Dam. Bohn noted he and Haitao were working on a format to more clearly show dam/inundation areas that impact multiple localities.



Appendix D: Meeting Documentation

- Erin Hawkins noted that the HMP looks at individual dam inundation zones. Questioned if there was analysis associated with a worst case, cumulative failure scenario. It was agreed that HMP should include a regional dam study/analysis within the regional strategies.

ACTION: Develop wording/include dam study analysis within regional mitigation strategies.

- Hawkins noted there is some graphic laying on top of maps around page 72/73.
- Kristen Owen noted that she had some comments regarding the maps and some other specific comments from the Chapter. Owen will speak with Wang/Bohn individually regarding comments.

Review/Confirmation of Follow Up Action Items

Hitchcock reiterated the request for localities to review the HMP Flood and Dam Chapters and provide comments by Friday, May 1st. She also noted, unless there were specific concerns noted by the end of the week, Bohn/Wang will continue with the other hazard chapters with the same format.

CVPDC HMP Completion Schedule

Hitchcock noted she had communicated with VDEM/FEMA regarding public meetings. It has been confirmed that electronic format is permitted. It is anticipated that the draft strategies and access to the draft plan will be held in June. Hitchcock noted she will communicate with each locality and the full TAC on the outreach strategy. Chris Bruce confirmed that currently there is no word on a change in the FEMA mitigation grant cycle and thus, is expected to be announced in June with applications in November. Hitchcock noted the CVPDC HMP will meet this cycle.

Next Meeting

Date to Be Determined.

Hitchcock noted that there will be a similar electronic meeting in May to review the final hazard chapters and continued coordination with localities on individual strategies. Hitchcock noted that, according to standard dates, the May meeting would be the 3rd Thursday, May 21st. However, that date will not work so a new date will be established and provided so the TAC can hold the date.

Virtual Attendees

Jonaaron Evans, Campbell County
Janice Crawford, Framatome
Anthony Davis,
Erin Hawkins, City of Lynchburg
Piper VanDePerre, City of Lynchburg
Greg Bennett, Liberty University
Clay Ross, Bedford County
Sam Bryant, Amherst County
Jim Calvert, BWXT
Bill Bohn, Sobis Inc.
Kelly Hitchcock, CVPDC

Edward Chambers, Liberty University
Mallory Cook, CVPDC
Kristin Owen, DCR
Jeff Martin, City of Lynchburg
Ralph Lawson, Red Cross
Chris Bruce, VDEM
Bob Hopkins, ACSA/Amherst County
Mike Crews, Town of Brookneal
Todd Davis, Georgia Pacific
Haitao Wang, VT-CGIT



Appendix D: Meeting Documentation

CVPDC Hazard Mitigation Plan Update

Project Meeting

May 28, 2020

Web/Go-To-Meeting

3:00 pm – 4:30pm

Agenda

1. Introduction
2. Draft Hazard Chapter(s) Review/Discussion
3. Mitigation Strategies

Region-wide, Locality-specific

4. CVHMP Website – Review/Discussion
5. CVHMP Public Meeting – Format, Public Outreach
6. Review/Confirmation of Follow Up Action Items

Minutes

1. Introduction

Hitchcock welcomed participants. Bill Bohn provided an overview of the Agenda and meeting intent.

2. Draft Hazard Chapter(s) Review/Discussion

Bohn reminded the group that additional Draft Hazard Chapters had been provided and that a response by June 8th was requested. Bohn noted that unlike the Flood and Dam Chapters, these hazard chapters were generally not long, with some being quite short. Bohn noted the importance of each locality reviewing those sections related to their area.

Bohn also noted that four (4) additional hazard chapters, with a focus more on human-caused hazards would be sent and a review would be requested. Additional review time for these will be provided. Bohn asked for comments regarding the draft chapters or the review process in general. There were no specific questions or comments regarding the draft chapter content during the meeting. It was noted that some comments had been provided and that all reviews - edits or general comments – can be made directly on the document and will be seen.

Draft Chapter Comments:

Erin Hawkins requested additional time to review the additional chapters.

- Hitchcock confirmed additional comment period for additional chapters and, that if time was need for current chapters to contact her or Bill. Bohn noted the need to finalize these chapters as they inform mitigation activities.



Appendix D: Meeting Documentation

Draft Hazard Chapter Review Follow Up Actions

- Stakeholders review and provide comments to the Draft Hazard Chapters.
- Hitchcock will send out the final 4 draft hazard chapters.

3. Mitigation Strategies

Bohn noted that with the general completion of the Hazard Chapters, focus would be directed towards Mitigation Strategies. Bohn noted that the draft regional mitigation strategies had been developed (showed document on screen) and will serve as the foundation for the individual locality strategies. Bohn noted that instead of having a full group meeting, each locality would be contacted, and the primary locality contacts will have individual meetings focused on mitigation strategies. Bohn noted that some preliminary projects had been identified for each locality. However, he wants to guide discussion to review the list and consider any additional projects.

Bohn and Hitchcock noted that individual locality web meetings would be held the 9th and 10th of June. Hitchcock will contact each locality to request a few 1-hour meeting options to hold the mitigation strategy meetings.

Mitigation Strategy Follow Up Actions

- Hitchcock send out mitigation strategy meeting emails to locality contacts
- Locality contacts respond with June 9th or 10th availability options
- Hitchcock send draft mitigation strategy list to locality contacts

4. CVHMP Website – Review/Discussion

Bohn provided an overview of the Draft CVPDC Hazard Mitigation Plan website developed by CGIT. Bohn, in review of the Community Tab noted that currently only the larger localities are noted. Bohn asked if the Town's needed their own community profile section or if they could be noted within the County description. No specific response was noted. It was agreed that Hitchcock will reach out to the Towns regarding this element of the website.

Bohn provided an overview of the maps and mapping section capabilities. It was noted that a simple Mapping Tool How to document would be added.

It was noted that the website was a draft and that there were features still under development. Bohn noted that a key element missing is local images. Stakeholders were asked to please send any local images, that might also include historical hazard images, that could be used on the site and would not need special citing. Hitchcock noted, she would include the image appeal in the pending email.

Website Comments:

- Hawkins sought confirmation that the site would stay active and a tool to monitor HMP success over time. Hitchcock confirmed that the site will remain active.
- Susannah Smith questioned if there will be a continuous monitoring component to the HMP and what those aspects will be. Hitchcock noted there will be a maintenance component and that is a required HMP element. She noted that she will draft the overview element, which is intended to include at least yearly meeting of a project team and will include review and metric of mitigation strategy execution. Hitchcock noted that the lack of HMP oversight, maintenance, and review of mitigation strategy activity was one of the cited negative FEMA comments from the past HMP.



Appendix D: Meeting Documentation

HMP Website Follow Up Actions

- Send Hitchcock any locality images – represent the locality and any historical hazard images – that can be used on the HMP website.
- Send locality images to Kelly
- Hitchcock develop written elements for planning and about section of the site.
- CGIT, Sobis, CVPDC staff team finalize draft elements to send for review prior to community meeting.

5. HMP Public Meeting

It was confirmed that the 2nd HMP public meeting will be Thursday, June 25th and will be via a webex format. It was confirmed that the ability to have a webex meeting is according to VDEM/FEMA approval. Hitchcock noted that the meeting is intended to be via a ZOOM format but that the CVPDC also has Go-To-Meeting format capability. Hitchcock questioned if anyone had a format preference. It was agreed ZOOM format would be used.

Hitchcock confirmed that she will provide each locality information for their board packages, their locality website and will also share format information to share on any social media format – Facebook, Instagram, etc.

It was also confirmed that Bill Bohn will lead the meeting through a presentation format, that all users will be muted until an end question session, and that participants will be asked to enter their names in the chat format. It was also confirmed that the meeting will be recorded and that information on how to provide comment and future HMP review information will be provided. Lastly, Bohn confirmed that he will provide a draft presentation for review by June 18th.

Public Meeting Comments:

- Zoom format agreed.

Public Meeting Follow Up Actions

- Hitchcock provide meeting announcement information, to include multiple social media format content, to localities.
- Bohn provide draft public meeting presentation by June 18th for review.

6. Review/Confirmation of Follow Up Action Items

1. Hitchcock send out mitigation strategy meeting emails to locality contacts
2. Locality contacts respond with June 9th or 10th availability options
3. Hitchcock send draft mitigation strategy list to locality contacts
4. Hitchcock send out mitigation strategy meeting emails to locality contacts
5. Locality contacts respond with June 9th or 10th availability options
6. Hitchcock send draft mitigation strategy list to locality contacts
7. Send Hitchcock any locality images – represent the locality and any historical hazard images – that can be used on the HMP website.
8. Send locality images to Kelly
9. Hitchcock develop written elements for planning and about section of the site.
10. Hitchcock provide meeting announcement information, to include multiple social media format content, to localities.



Appendix D: Meeting Documentation

11. Bohn provide draft public meeting presentation by June 18th for review.

7. Meeting adjourned

Virtual Attendees

Anne Witt, DMME
Jonaaron Evans, Campbell County
Erin Hawkins, Lynchburg City
Piper VandePerre, Lynchburg City
Lauren Pillow, DEQ
Sharon Williams, Altavista
William Perry, VDOF
Susannah Smith, Lynchburg City
Mike Crews, Town of Brookneal
Bill Bohn, Sobis, Inc
Haitao Wang, VT CGIT
Kelly Hitchcock, CVPDC



Appendix D: Meeting Documentation

CVPDC Hazard Mitigation Plan Update

Project Meeting

August 19, 2020

Virtual Meeting

<https://global.gotomeeting.com/join/730398909>; Access Code: 730-398-909

3:00 pm – 4:30pm

Agenda

1. Confirmation of Draft Plan review & submittal to VDEM & FEMA
2. Draft Plan Review – highlight key section for feedback
 - a. Jurisdiction descriptions,
 - b. Planning process,
 - c. HIRA intro and conclusion,
 - d. Capabilities,
 - e. Mitigation, and
 - f. Implementation and maintenance.
3. Confirmation of FEMA expectations; HMP Crosswalk review
4. FEMA Pre-Mitigation Program – Grant schedule
5. Preparation for Locality HMP Presentation and Adoption

Minutes

1. Confirmation of Draft Plan review & submittal to VDEM & FEMA Kelly Hitchcock and Bill Bohn noted that through the TAC and stakeholder contribution the draft plan was nearing completion. Bohn noted that the TAC, locality stakeholders were asked to review the draft document and provide comment to Kelly by Monday, August 31st. Hitchcock noted that it is understood there may be some specific locality strategies or editorial components that will continue to be added, the key is that the primary elements of the Draft HMP Plan can be sent to Chris Bruce/VDEM for preliminary review and evaluation of necessary HMP components for FEMA submittal. The Draft CVPDC HMP will be submitted to FEMA in September.

2. Draft Plan Review – Section Highlights Bohn provided an overview of the draft document. Bohn highlighted those elements of the draft that would be valuable for the TAC to take special review and provide comments/edits/additions. It was asked that the TAC have their edits, suggestions, questions back to Kelly by Monday, August 31st. Hitchcock reiterated that the full draft will be made available for public review and 30 day comment, etc. in the fall.

Sections included:

- Jurisdiction descriptions – Bohn noted that there might be some need to expand some Town descriptions and welcomed additional information; Planning Process – set to highlight the outreach, team, stakeholder input. Bohn noted copies will be included in Appendix. Bohn also



Appendix D: Meeting Documentation

noted that what will also be added to the Appendix, as will be required by FEMA, will be the individual locality adoption documentation.

- HIRA intro and conclusion – Bohn noted that the Draft does not include the detailed HIRA chapters as those have been reviewed/edited prior and would make the file very large. Bohn highlighted that within the introduction were overview of critical facilities (a full list of critical facilities will be available in the appendix).
- Capabilities – Highlights the locality communication with Hitchcock/Bohn. Bohn noted that some of the charts were place holders and would be updated to reflect the Capabilities Chart that reflects the communication with Kelly. Section also includes detail of implementation/funding agencies and programs.
- Mitigation – Chapter captures the regional strategies and the individual locality strategies. Bohn encouraged localities to review. Hitchcock noted that they are still finalizing some strategies with localities. She also noted that while the Draft HMP document is being reviewed by VDEM – who will be looking for content according to requirements – adjustments to these lists can/will continue.
 - Chris Bruce, VDEM confirmed that elements of the Draft can be adjusted during his review. However, when the HMP is submitted to FEMA it does need to be in the final format. He noted changes can be addressed through the maintenance and amendment process.
 - Chief Jones questioned if the mitigation strategy for an Emergency Manager could be included within the HMP. Bohn noted that this could. Hitchcock noted that Sam Bryant, Amherst, had noted the same need. Hitchcock agreed she will communicate with each to add within the local/regional strategies.
- Implementation and Maintenance – Bohn noted this is a totally new section and noted this was a section that was not developed and the HMP was not maintained in the last plan. Hitchcock noted the section outlines a process where the CVPDC and the localities continue to meet and seek opportunities to execute and monitor progress.

3. Confirmation of FEMA expectations; HMP Crosswalk review Bohn summarized the FEMA HMP Crosswalk and highlighted this document served as the foundation for the HMP activities and the VDEM/FEMA review. Tom Fore pointed out that Altavista has been awarded a mitigation grant by FEMA and appreciated the plan development process and the benefit in the grant approval process.

4. FEMA Pre-Mitigation Program – Grant Schedule Bohn confirmed that FEMA has announced and opened the next pre mitigation grant round. Bohn highlighted the grants are due to VDEM in November and that there are a number of how-to-apply workshops. A summary of the FEMA grant information and application workshop information will be provided. Hitchcock noted the information sheet will be sent out along with the Draft Plan link.

5. Preparation for Locality HMP Presentation and Adoption An overview of the final review and locality adoption process was discussed. Hitchcock noted that the Draft Plan will be submitted to Chris Bruce, VDEM the first week in September. Bruce confirmed that the review typically is two to three weeks, however any emergency can impact that review time. Bruce reiterated that what is submitted to FEMA must be the complete draft document – thus all mitigation strategies within this version. Bruce noted that amendments to the document can be made for later strategies. Bruce also noted that FEMA review process is typically two months, and that a major emergency could impact that review. Chris suggested that presentations to the localities, that will incorporate FEMA recommendations, would more likely be



Appendix D: Meeting Documentation

in the December timeframe. Chris noted that all the localities will be able to submit grant applications however, HMP adoption must have taken place by awards. Hitchcock confirmed that she and Bohn will communicate with Chris to confirm the VDEM review, FEMA submittal, FEMA review and locality presentation, adoption request schedule and provide to the TAC.

Virtual Attendees

Mary Zirkle, Town of Bedford
Chief Jack Jones, Bedford County
Jonaaron Evans, Campbell County
Tom Fore, Town of Altavista
Amy McDaniel, Lynchburg City
Myra Simpson, Campbell County
Piper VanDePerre, Lynchburg City
Sharon Williams, Town of Altavista

Chris Bruce, VDEM
Melissa Foster, Lynchburg City
Gary Williams, Town of Amherst
Susanna Smith, Lynchburg City
Haitao Wang, CGIT
Bill Bohn, SOBIS Inc.
Kelly Hitchcock, CVPDC

Local Emergency Planning Committee (LEPC) Meeting City of Lynchburg LEPC January 15, 2020 Minutes

Chair Jeff Martin called the meeting to order:

1. Welcome and Introductions
2. Hazmat Update: Todd Davis gave a brief summary of hazmat activities for the calendar year 2019.
 - a. 66 responses for natural gas leaks on the Rescue, 73 total for the department
 - b. 22 flammable spill responses
 - c. 8-10 catch basins deployed
 - d. Personnel sent to trainings for hazmat technician, Chempack, Framatome, bioterrorism drill at LU, tank truck and propane, several conferences
 - e. New Iso Identifier Pager purchased
 - f. 1 new hire to the hazmat team, 1 member left
3. Upcoming training opportunities:
 - a. NSPA will be hosting a pediatric disaster response course in July. The course is 2 days long and free of charge. It will be held at the Vinton War Memorial. For more information, please reach out to mmccullough@vaems.org.
 - b. NSPA also offers mental health classes. These can be requested by fire departments as well as other agencies and will fulfill the requirement to offer this type of class to first responders.
4. The group discussed proposed legislation Virginia House Bill 1192 which would potentially require organizations with "aboveground storage tanks" of hazardous materials with total storage capacity of 1320 gallons or more to register their tanks, providing similar information to that which is required on a Tier II report, and forward this report to the Director of Environmental Quality and their local director of emergency management.
5. Emergency Services reported that their department is working on the capability to receive text-to-911 messages by the deadline of July 1, 2020. They have also completed the update process for the Lynchburg Emergency Operations Plan (EOP) which will go to Council for readoption on January 28, 2020.



Appendix D: Meeting Documentation

6. Kelly Hitchcock with the Central Virginia Planning District Commission gave an update on the progress of the region's efforts to complete/update its hazard mitigation plan. The group will be having two more meetings in January and February and there will be multiple opportunities for public input. This plan is important because it outlines the types of hazards that our region is vulnerable to as well as provides specific mitigation strategies that could reduce these vulnerabilities. The inclusion of these strategies in the plan is particularly significant because having them in the plan opens up the possibility of using grant money to fund future projects if accepted by FEMA. The plan is expected to be completed in Spring of 2020.
7. After the meeting a tour of the Water Treatment Plant was provided to attendees that were interested.
8. Next meeting to be held April 15th, 2020 at 2 pm, location TBD.

Sign In Sheet

LYNCHBURG LEPC SIGN-IN SHEET 01/15/2020 MEETING			
NAME	AGENCY/BUSINESS	EMAIL ADDRESS	PHONE NUMBER
Piper VanDerPrie	Emergency Services	Piper.vanderprie@lynchburgva.gov	434-401-2418
Zachary Perkins	Emergency Services	zachary.perkins@lynchburgva.gov	434-546-0082
Kelly Hitchcock	CVPDC	kelly.hitchcock@cvpdc.org	434-845-3491

LYNCHBURG LEPC SIGN-IN SHEET 1/15/2020 MEETING			
NAME	AGENCY/BUSINESS	EMAIL ADDRESS	PHONE NUMBER
Ellen Davidson-Martin	City IT Dept.	ellen.davidson-martin@lynchburgva.gov	(434) 455-6037
Todd Davis	Lynchburg Fire Dept	anthony.davis@lynchburgva.gov	(434) 942-3473

LYNCHBURG LEPC SIGN-IN SHEET 1/15/2020 MEETING			
NAME	AGENCY/BUSINESS	EMAIL ADDRESS	PHONE NUMBER
Jeff Sydenstricker	CVCC	sydenstrickerj@centralvirginia.edu	434-832-7756
Christina Ferrell	Horizon	christina-ferrell@horizon.org	434-946-2210
Joe Dawdy	Horizon	Joseph.Dawdy@horizon.org	434-221-3412
ROGER PENNY	RED CROSS	roger.penny@redcross.org	434-841-4483
Ralph LANSOR	RED CROSS	Ralph.Lansor@redcross.org	434-709-0199



Appendix D: Meeting Documentation

**LYNCHBURG LEPC SIGN-IN SHEET
1/15/2020 MEETING**

NAME	AGENCY/BUSINESS	EMAIL ADDRESS	PHONE NUMBER
Greg Bennett	LLC	gobennett@liberty.edu	407-488-9333
Kate Edwards	LUPD	kwinney4@liberty.edu	434-907-9935
Jennifer Martin	LACL	jmartin@laci.org	434-528-4971 x1007
Brittany Powell	VDH	brittany.powell@vdh.virginia.gov	434-941-3087
Monica McGillogh	NSPA	mcmcgillogh@vaems.org	540-529-9649

**LYNCHBURG LEPC SIGN-IN SHEET
1/15/2020 MEETING**

NAME	AGENCY/BUSINESS	EMAIL ADDRESS	PHONE NUMBER
Mike Reeves	FIRE	MIKE.REEVES@LYNCHBURGVA.GOV	434-660-0823
Erin Hawkins	COL	erin.hawkins@lynchburgva.gov	455-3869
Craig Homay	COL	CRAIG.HOMAY@LYNCHBURGVA.GOV	455-4085
Diane Reed	Centra	diane.reed@centrahealth.com	434 316 3736



Appendix D: Meeting Documentation

CVPDC Hazard Mitigation Plan Update
Locality Vulnerability Meetings
Amherst County, Town of Amherst Town
CVPDC Office
828 Main St., 12th Floor
Wednesday, February 19, 2020
8:30 am – 11:00 am

Attending

Sara Carter, Town of Amherst
Gary Williams, Director of Plants
Bob Hopkins, Amherst County Service Authority
Sam Bryant, Amherst County
Bill Bohn, Sobis, Inc (consultant partner with VT-CGIT)
Kelly Hitchcock, CVPDC

Minutes

1. INTRODUCTION

Hitchcock welcomed and provided brief background and summary of earlier meeting and HMP plan activity.

2. LOCALITY HAZARD VULNERABILITY REVIEW

Bill Bohn, Sobis, Inc., facilitated the vulnerability meeting and presented locality-specific data and vulnerability for primary hazards. The following reflects key discussion points from the data review and discussion within each of the hazards.

Flood

Bohn provided flood data, that included review of critical facilities.

- Rutledge Creek WWTP in the floodplain.
 - Gary noted headworks not in high elevation area.
 - It was noted plans area in place for high water, sand bagging is used and available.
 - Standby, secondary power is up the hill
 - Sara Carter noted that property protection for the system should be included in the HMP.
- Town of Amherst Raw Water Intake in flood zone. The need to harden the facility is known and the Town is working though a VDH grant to implement a complete water system evaluation and upgrade than includes plant, pump stations and other core facilities. Bohn will contact Town for upgrade details.
- Pedlar Volunteer Fire & Rescue
 - It was noted this has flooded before; volunteers maintain the building and have elevated materials. The facility take about 3% of local emergency calls. It was noted the radio tower is in the area as well.
 - Coordinating and incorporating hardening information/practices.
- Monacan Ancestral Museum
 - Sam Bryant Confirmed folks area aware the facility – which includes a number of resources – is in the floodplain. It was noted that the office is now located in the Town. Additionally, key artifacts have been elevated. Bohn noted communicating and recommending action plan for flooding an valuable activity.
- Two campgrounds are in the flood zone. Oronoco Campground and Otter Creek. Bohn said having information for campers is a mitigation activity to incorporate.
- Bohn looked at churches and more remote residential areas. Louisville area/Woodson area of the County.
- Bohn noted that portion of the Natural Gas line area within the flood zone. Communication and coordination with the company is a mitigation activity.



Appendix D: Meeting Documentation

- Bob Hopkins noted that a trunk line from the County's sewer, collects about 50% of waste, is on the north bank of James River. A major Corp of Engineer project underway to armor a portion of the line. Hopkins noted that he has established a detailed HMP project list for the ACSA system.
- Susan Carter noted that portions of the Town's system follow stream and suggest that the HMP include general wording for water/sewer line protection, to include streambank stabilization.
- Bohn provided information on residential and outbuildings/sheds located in flood plain. Pointed out that often homes are not in flood zone, but residents locate sheds. Opportunity to provide education on location, practices for elevating materials. Bohn also noted some localities include ordinances requiring permits for new out building structures.
- Sara Carter reiterated the importance of including HMP mitigation vulnerability text noting the Town's sewer lines flow adjacent to streams and pointed to the need for streambank stabilization as a infrastructure protection action.
- Carter also noted the need to highlight Town's pump stations in the floodplain and importance of road access to the pump stations in hazard event.

Amherst Flood Mitigation Strategies

- Initiate facility hardening/protection measures for the Town's water/sewer infrastructure (summary from Town).
- James River streambank stabilization for ACSA sewer line/system protection (summary from ACSA).
- Harden Amherst Town raw water intake facility.
- Initiate facility system hardening/protection for the Pedlar Volunteer Fire & Rescue facility.
- In partnership with Monacan Nation, establish flood mitigation plan for the Monacan Ancestral Museum.
- Establish a public information process for safety measures/practices/information at area campgrounds.
- Expand and establish regular communication with Colonial Natural Gas company to ensure quick and established hazard response.
- Develop information/outreach to public regarding location of outbuildings in flood zone and general property evaluation and mitigation best practices.
- Include information on flood zone, or link to DCR information, on locality website. Include opportunity for residents to look up their address.

Amherst Flood Follow up Actions

- Follow up with Town for detailed system upgrades (via the existing VDH grant) and detailed summary of additional action for HMP strategies.
- Communicate with Hopkins to insure full ACSA infrastructure system HMP actions.

Dams

Bohn noted High Hazard Dam (HHD) information was obtained from DCR and there are five (5) HHD noted in Amherst County.

- Pedlar River Dam – no critical facilities in the inundation area.
- Graham Creek Reservoir – treatment plan in the inundation area
- Stonehouse Lake Dam
- Thrashers Creek Dam
- Reusens Dam

Bohn noted that a public information strategy is to post information about the flood inundation areas on local websites. Provide ability for residents to see if property in the area and provide information about flood insurance. Hopkins noted that the ACSA plant is in the flood inundation zone; need to be added to the list 3



Appendix D: Meeting Documentation

Amherst Dam Mitigation Strategies

- Include information about dams, dam inundation zones or link to DCR website on locality websites.

Amherst Dam Follow up Actions

- Include ACSA plant within dam inundation zone.

Wildfire

Bohn noted for Amherst wildfire is a hazard with considerable likelihood and impact for Amherst.

- Sam Bryant noted the wildfire where 30,000 acres was impacted and the importance of the Dept of Forestry and local volunteer fire departments. Bryant noted that capacity – the numbers within the local volunteer fire departments is a real concern.
- Bryant noted there are two important strategies – dry hydrants and land (access routes) and water sources. Bryant noted the County has fire truck with 4,000 gallon water capacity that can be filled in approximately 4 minutes. The key is access to the water (routes).
- It was noted that County has its 911 system serving Everbridge area but, need to expand subscriptions to the system. Bryant will provide the current number.
- There are two swift water teams – Monetelson Fire & Amherst Fire. Ensuring these departments are fully stocked and have necessary equipment should be within the HMP.
- Bryant noted the County contacts the City of Lynchburg in the event of a Hazmat event and in a larger event would rely on VDEM.
- Bryant noted he has begun looking into the equipment/supply needs/training task to respond to technical rescues. Bryant will follow up with Hitchcock to outline activity for HMP.

Amherst Wildfire Mitigation Strategies

- Expand number of dry hydrants located in the County, especially in vulnerable, isolated community areas.
- Establish public outreach for participation in the 911 system.
- Expand swift water rescue capabilities (details to come).
- Evaluate necessary actions to expand technical rescues/hazard response capabilities.
- Increase communication with Forest Service, and private property owners to expand emergency access to water sources.

Amherst Wildfire Follow up Actions

- Communicate with Bryant on swift water and technical rescue needs/existing status.
- Follow with Bryant on number of existing 911 system registrants.

Wind/Power Outage/Heat

Bohn shared data of known mobile home parks.

- The use of Hurricane straps for buildings, tie-down strategies for mobile home.
- Bohn noted a mitigation strategy is to share with developers, homeowners the ease/value (often reduction in home insurance) in installing hurricane strips to roof trusses.
- Do not have specific cooling stations, local churches provide services
- It was noted that there is not back up generators to run cooling at the Town Office or Police Station; should be included in the HMP.
- It was suggested an evaluation of all the essential facilities (Library) for secondary system should be included in the HMP.
- Bohn questioned if there were any other Hazmat situations that could be impacted during hazard event. It was noted that train runs near a 30,000 gallon propane tank in the Town. It was noted the County has a good partnership with the City, but the program is reactive, not proactive. Establishing a preventative program should be included in the HMP.
- Grieff Brothers/train and impacts to natural hazard. Value in establishing proactive communication with these industries.



Appendix D: Meeting Documentation

- It was also noted that the County has a good relationship with Sweet Briar College and Centra Health in responding to needs.

Amherst Wind/Power/Heat Mitigation Strategies

- Outreach to insurance, building officials, builders, families for installation of wind/HERK straps for new builds; especially target mobile home wind safety strategies/practices/safe location.
- Evaluate secondary/emergency need evaluations at public community spaces (e.g. library, locality offices).
- Provide back up generators at Town critical facilities (confirm locations).
- Develop hazmat/emergency response plans in partnership with industry, facilities along the rail line. Establish emergency response reviews with locations that house large number of residents (e.g. Sweet Briar College).

Amherst Wind/Power/Heat Follow up Actions

- Follow up with Town on facilities to include secondary generator/power back up.

Earthquakes

Bohn noted earthquakes not much concern in our area. Bohn noted susceptibility of these older structures to earthquake damage. Suggested education to school administration/staff to know location of older school areas and where to locate kids/staff in event of emergency. No other specific discussion items or strategy recommendations were noted.

3. Draft HMP Completion Steps

Hitchcock confirmed that the summary of the meeting would be provided to all of the participants and noted a summary of Draft Mitigation Activities and the Draft Amherst Capacity and Vulnerability Chapter would be provided.

The CVPDC HMP Public Meetings – that would present general information and draft strategies would be held in April. Each locality will be able to determine if they want individual public meetings.

The full Draft CVPDC HMP would be submitted to VDEM and FEMA in May.



Appendix D: Meeting Documentation

CVPDC Hazard Mitigation Plan Update

Locality Vulnerability Meetings

Campbell Hazard Vulnerability Review

CVPDC Office

828 Main Street, 12th Floor

Tuesday, February 18, 2020

11:00 am – 1:30 pm

Attending

Paul Harvey, Director Community Development, Campbell County

Brian Stokes, Environmental Manager, Campbell County

Tim Hoden, Director of Operations, Campbell County

Todd Scott, Agriculture Agent Campbell County

David Garrett, Public Works Director, Town of Altavista

Cliff Tweedy, Deputy County Administrator, Campbell County

Sharon Williams, Director Community Development, Town of Altavista

Marvin Tweedy, VDOT Facilities Manager, VDOT-Salem

Russell Thurston, Town Manager, Town of Brookneal

Michael Crews, Public Works Director, Town of Brookneal

Myra Simpson, Deputy Director, Campbell County Public Safety

Tracy Fairchild, Public Safety Director, Campbell County Public Safety

Jonaaron Evans, Communication Tech, Campbell County Public Safety

Austin Mitchell, Zoning & Subdivision Administrator, Campbell County Community Development

David Kerr, GIS Analyst, Campbell County Community Development

Tom Fore, Director Public Utilities, Town of Altavista

Bill Bohn, Sobis, Inc.

Kelly Hitchcock, CVPDC

Minutes

1. Introduction

Hitchcock welcomed participants, provided brief HMP background summary. Introductions were made.

Bill Bohn welcomed, provided overview of meeting purpose.

2. Locality Hazard Vulnerability Review

Bill Bohn, Sobis, Inc., facilitated the vulnerability meeting and presented locality-specific data and vulnerability for primary hazards. The following reflects key discussion points from the data review and discussion within each of the hazards.

Flood

Bohn presented vulnerability flood map. Bohn noted information does not include stormwater impacted areas (local input needed). Also noted the data does not currently include FEMA repetitive loss data as there are some data/software updates that have resulted in FEMA delay in providing information to DCR. Data is anticipated in the coming months.

- Data showed Campbell County unique in that a fairly high percentage of 65-year old and up (at about 25%) are located in the floodplain.
- Bohn presented and discussion of critical facilities in the floodplain.



Appendix D: Meeting Documentation

Brookneal Treatment plant

- Ditching in plan development. Noted last time river known over the bank in 1996. Tom Fore will provide summary of planned activities.

Otter River 2

- Intake, pumps for plant up the hill. Reservoir can provide 10/15 days capacity with pump adjustment. Opportunity for higher, elongated elevation.

Flat Creek Pump Station

- Mounted above ground , wet well.
- Brian Stokes questioned flood map., noted not aware of high water issues in this area and indicated he tried to get remapping of the area about two miles down. Stokes noted an undersized culvert under Route 29 that results in impacts.

Hydropower

- Bohn asked if anyone knew the design level. No one was sure.
- It was noted hazardous material in this area at BGF Industries. Stokes noted that BGF replaced culvert a number of years ago; hazardous holding pond.
- Fore noted problem puts Altavista wastewater facility under water.
- Strategy – installation of berm/facility protection structure.
- Bohn asked is there anything done currently with business from information standpoint?
- It was noted that UVA Medical Center - dialysis and cancer treatment. How are patients informed. It was suggested a local strategy can be to establish communication with businesses to ensure system to inform patients in case of flooding (where to go and when not to come to facility). Communication for backup services.

Communication Tower

- IT was noted this is not being used. Should this be removed?

Wastewater Treatment

- Tom Fore will provide detailed summary of improvement plans/mitigation request for system.

Seneca Park Pump Station

Framatome

- Treatment and access road in floodplain.
- Bohn noted importance and strategy to communicate with businesses. Ask what hazard in-place plans are. Very private, work to expand communication.

Other

Bohn asked if there were any other critical facilities with issues.

- It was noted that AEP is expanding Joshua Falls substation. Should not be in floodplain.
- It was noted that Campbell County has a number of tunnels, railroad that are subject to flooding. Pennsylvania Avenue, flooding on this bridge and this is roadway to water plant.
- Bohn asked if County looked at ordinances to reduce development. Bohn noted no adverse impact regulations can be put in place and other actions that support reduction in insurance.



Appendix D: Meeting Documentation

- Bohn asked floodplain can be filled in and built. Brian Stokes noted the county discourages building and developer must contact FEMA first. Noted there is restrictive language. Do not allow in theory, make difficult, but developer can go to FEMA. Infrastructure is required above baseline elevation. Not a no but, make restrictive.
- Bohn noted another strategy and element to look at is out buildings in the floodplain. Suggested locality look at consideration for wording and, at a minimum include information to public on education/outreach for outbuilding/material education.
- David Garrett, Altavista noted that Altavista YMCA has an area in the flood area. Noted outreach and education to this facility on readiness, needs to be an included strategy.
- Tom Fore indicated the Hurt Water Treatment Plant flooded in the 80's and impacted the area. Communication and impact for the areas downstream should be included in the plan and understanding of their mitigation activities.

Campbell Flood Mitigation Strategies

- Install ditching, berm or other flood protection device to protect Brookneal Treatment plant.
- Instigate elevation and flood mitigation evaluation study at local facilities.
- Evaluate and, if needed, upsize culvert on Route 29 (get detailed location from Stokes).
- Initiate hazard communication and mitigation outreach to area businesses that manage or hold hazardous materials.
- Develop public hazard communication outreach, include importance of joining County's public information system.
- Communicate with facilities, especially those that provide public services (eg UVA medical/dialysis program).

Campbell Flood Follow up Actions

- Obtain detailed Altavista system mitigation improvements from Fore
- Provide map details to Campbell for review

Dam Breach

- Bohn noted DCR indicated 3 High Hazard (HH Dam) Dams in the County – Timberlake/Leesville, Otter River, Camp Hideaway – which is not yet built.
- It was noted that Rustburg is not a HH Dam but does have safety exercises. It was noted that Emergency Action Plans (EAPs) are in place for each HH Dam.
- There was some discussion regarding Otter River Dam; it was determined this was referring to the reservoir.
- Bohn noted that some mitigation activities can be posting general information regarding flood inundation zones and general flood information on websites. Confirmed that Timberlake has dam emergency exercises yearly.

Wildfire

- Bohn provided general data overview. Noted the wooded/higher residential interface areas. Also questioned water capacity in forested areas.
- Seneca Park Pump Station – does not impact residential, just a few businesses

Campbell Wildfire Mitigation Strategies

- Explore controlled burns with forest service to reduce impacts.



Appendix D: Meeting Documentation

- Explore installation of dry hydrant or execute a study to evaluate dry hydrant needs in the community.

Tornado and other winds

- Bohn noted that looked at date to reveal areas without basements and pocket manufactured home areas.
- The use of HERK straps for buildings, tie-down strategies for mobile home; and undergrounding of powerlines to key infrastructure was another noted strategy.
- Warning systems – It was noted that so many people no longer rely on local news, information and have subscription services. The need to ensure information to these folks.
- It was noted about ¼ of County currently signed up for the County's alert system.
- It was noted that often in emergency local personnel can not get through road closures set up by VDOT. There is a need for coordination in communication and verification of critical staff, emergency access protocol.

Campbell Wind/Power Outage Mitigation Strategies

- Outreach to insurance, building officials, builders, families for installation of wind/HERK straps for new builds; especially target mobile home wind safety strategies/practices/safe location.
- Undergrounding of utility lines to key infrastructure/critical facilities.
- Establish format to ensure emergency outreach, promote participation in County information system.
- Establish communication/coordination between agencies/emergency personnel to allow property access, evacuations, response emergency response and road access.

Extreme Temperatures - heat/cold

Bohn shared temp data.

- County and Towns do not have designated cooling stations. However, ability to open community centers if the need arises is available.
- Myra Simpson will send emergency shelter location information.
- Bohn asked about crop insurance. Todd Scott noted that farmers have insurance, however there is about a 6-month delay to see impact on hay production or other impacts.
- Todd Scott noted drought impact on cattle and the need for CREP funds for secondary water sources.
- Cliff Tweedy noted there has been the use of container water stations.
- The County does have the capacity to instigate water restrictions; threshold based on request from water authority.
- Tom Fore noted the need for a water study to evaluate long term water capacity needs.
- It was noted that the mechanical needs of community centers – air condition needs, mechanical work condition, etc. is not known. There should be evaluation of these facilities.

Campbell Heat/Cold Mitigation Strategies

- Continue to investigate secondary water sources
- Secondary generators at critical facilities
- Education/information outreach
- Consider drought/prolonged high temperature process for public support



Appendix D: Meeting Documentation

- Study, evaluation of community center mechanical systems and overall cooling, emergency use needs.
- Include water sources or coordination with other agricultural agencies for water access

Campbell Heat/Cold Follow up Actions

- Hitchcock follow up with Simpson for emergency shelter location information

Storms – winter/thunder/hail

- Date and general concern discussion related to electrical outage and road closures. The impact of tunnels on access was noted as potential impact for Campbell. There was question regarding the inspection cycle and communication regarding the tunnel.
- Other than public information and outreach, related to readiness and best practices, as with other hazards, there were no specific concerns or strategies noted for storms.

Earthquake

- Bohn noted fault line in Campbell County. Bohn noted susceptibility of these older structures to earthquake damage. Suggested education to school administration/staff to know location of older school areas and where to locate kids/staff in event of emergency. No other specific discussion items or strategy recommendations were noted.
- The potentially sustainability of railroad tunnels on the community was noted. The need for coordination with railroad to obtain inspection cycles or communication was noted.

3. Confirmation Next Draft Plan Completion Steps

Hitchcock noted that meeting summaries would be provided. HMP Public Meetings will be held during April, Hitchcock will communicate with each locality to determine schedule and if they want a public meeting. Draft HMP is anticipated for VDEM/FEMA submittal in May and will be brought back to localities during the summer for approval/adoption.



Appendix D: Meeting Documentation

CVPDC Hazard Mitigation Plan Update

Locality Vulnerability Meetings

Appomattox County, Appomattox Town

Appomattox County Public Safety Office

339 Court Street, Appomattox

Tuesday, February 18, 2020

2:00 – 4:30 pm

Attending

Jeff Elder, Facilities Director, Town of Appomattox

Gary Shanaberger, Manger, Town of Appomattox

Susan Walton, Captain, Appomattox County Rescue Squad

John Spencer, Interim Planner, Appomattox County

John Vannoy, 911 Supervisor, Appomattox County

Bobby Wingfield, Public Safety Director, Appomattox County

Bill Bohn, Sobis, Inc (consultant partner with VT-CGIT)

Kelly Hitchcock, CVPDC

Meeting Summary

1. INTRODUCTION

Bobby Wingfield welcomed and provided brief background and summary of earlier meeting and HMP plan activity.

Elder and Wingfield stressed the importance of presenting vulnerability and strategies that realistically present options, programs for small communities, with small budgets like Appomattox. Bohn confirmed that Appomattox does, generally have some lower risk as some of the other localities – as a function of population density, population proximity to high hazard potential. Bohn and Wingfield reiterated to the group the importance and value of the plan in reflecting both large and smaller, more likely, mitigation practices that can have considerable value and impact in the community.

2. LOCALITY HAZARD VULNERABILITY REVIEW

Bill Bohn, Sobis, Inc., facilitated the vulnerability meeting and presented locality-specific data and vulnerability for primary hazards. The following reflects key discussion points from the data review and discussion within each of the hazards.

Flood

Bohn provided flood data, that included review of critical facilities.

- 148 pump street – close to flood zone but noted this is not used anymore, includes electrical for the park only.
- Natural gas line – Bohn noted value in including the mitigation activity for standard communication with company. Wingfield noted that property owners along the line should be educated on location of line. Wingfield also noted that Williams and Colonial come to LPAC meeting and complete Title III reporting.
- Areas impacted by heavy rain flooding
- Sunnysdale/Church area regular stormwater impacts



Appendix D: Meeting Documentation

- Bent Creek at James River/Route 608/North Creek – need updated box culvert to address this area
- Hunter Street/Morris Ave/Dogwood Drive in Town – rain event flooding along the creek area.
- Route 611 at/near Route 666 (Wreck Island Creek)
- Blackberry lane flooding situation results in emergency vehicles can't access homes in this area (Wolfcreek).
- Ford Crossing at Washout Gap at 631 required frequent highwater rescues. It was noted that Robert Brown, VDOT, as result of earlier meeting was going to install highwater alert signage.
- Bohn noted he did not see evidence of hazardous materials in floodplain. Elder noted that Tiger Fuel had some tanks (area of Park to Lee Grant)
- Elder provided overview of system within the Town's water/sewer system. A summary of the improvements will be sent to Bohn/CGIT.
- Bohn questioned any known, specific agricultural flooding impacts. Elder noted there are low-lying areas, stream/pasture areas impacted by storm flooding but, most folks know these areas and part of general farming businesses. Did not have areas or conditions where there was unusual or high impact areas.

Appomattox Flood Mitigation Strategies

- Streambank stabilization/channelization project to address stormwater flooding in Sunnydale, South Church area.
- Look for opportunity to work with property owner (Hackett) to seek emergency access agreement to ensure access to mitigate flooding/access impact along Blackberry Lane.
- High water does not cross signage at Bent Creek, Route 666 (Wreck Island Creek), and Ford Crossing.
- Work with VDOT and Campbell County to address flooding, bridge, culvert flooding at 460/Moores County Store to ensure emergency access to hospital, etc.
- Establish communication with gas and small companies for education/outreach in hazard material storage and general hazard communication.
- Flood insurance education, to include information for renters for education on what renter's insurance pays for and opportunity for lower-rate flash flood rates.

Flood Follow up Actions

- Jeff Elder will provide summary of Town's water/sewer upgrade plan and pending improvements.

Dam Failure

Bohn provided information from DCR high hazard dam; questioned any additional non-high hazard dam concerns. Elder noted that Calwell had flooded.

Wildfire

Bohn presented Critical facilities and fire hazard data.

- Pineview Estate (shown as elderly center) is closed.
- County does have scattered residential throughout in light pine forested areas. Agreed general recommendations for information/education purposes on Fire Wise practices, set backs, and general practices to protect structures.



Appendix D: Meeting Documentation

Appomattox Wildfire Mitigation Strategies

- Fire Wise information/education make public
- Include HMP section, to include wildfire data on County website; reiterate to folks value in looking at property, cleaning, etc.

Tornado and other winds

Bohn presented wind vulnerable – manufactured home lots or older structure, density area – data.

- County does have an emergency alert system, does promote to residents, as of February 18, 2020 system included 3,902 contacts signed up for system alerts
- Wingfield noted that via IPAWS the area hooked into Cell carrier notices.
- Bohn noted that our region impact from hurricanes in our area more flash flooding, along with some wind. Suggested public information on flood insurance – lower rate when not in floodplain.

Appomattox Wind/Power Outage Mitigation Strategies

- Public outreach/education campaign for emergency system registration (can track changes in registrations).
- Outreach to insurance, building officials, builders for installation of wind stapes for new builds; especially target mobile home wind safety strategies/practices/safe location.
- Communication with essential employers/companies - BWXT
- Critical radio communication; generator at industrial park

Extreme Temperatures - heat/cold

Bohn shared temp data.

- Town/County do not have designated cooling centers. Generally, library/Walmart or other public locations serve the role.
- List of facilities with known generators included – Fire/rescue operation facility, school/community center.
- Wingfield noted a second generator at the 911 center, sheriff's office and emergency service for PSAPs would be valuation.
- Bohn questioned what the locality water use restriction capacity is in drought conditions. Town has 2 to 3 days capacity in storage tanks. Instigates restrictions based on state call.
- Town can, if need be, bring back old wells with 250,000 capacity.
- The Town/County did look at secondary water line routing at approximately \$5-6 million.

Appomattox Heat/Cold Mitigation Strategies

- Continue to investigate secondary water sources
- Secondary generators at critical facilities
- Education/information outreach
- Consider drought/prolonged high temperature confirmed public process

Storms – winter/thunder/hail

Date and general concern discussion related to electrical outage and road closures. Appomattox County does not have CERT team and has not seen the need for this in the county.

- General outreach and education related to readiness in the mitigation activity.



Appendix D: Meeting Documentation

Other Hazards

Earthquake

Bohn noted fault line in Campbell County. No high rise buildings in Appomattox but there are older masonry buildings – area schools. Bohn noted susceptibility of these older structures to earthquake damage. Suggested education to school administration/staff to know location of older school areas and where to locate kids/staff in event of emergency.

General Emergency Concerns/Observations

- Wingfield noted the increase in emergency situations/power outages for calls regarding breathing machines and need for oxygen. Walton confirmed a small number of spares available but request need exceeding capacity.
- Wingfield also noted the importance/value in seeking collaboration between local and regional agencies for emergency response.

3. Draft HMP Completion Steps

Hitchcock confirmed that the summary of the meeting would be provided to all of the participants and noted a summary of Draft Mitigation Activities and the Draft Appomattox Capacity and Vulnerability Chapter would be provided to folks in late March.

The CVPDC HMP Public Meetings – that would present general information and draft strategies would be held in April. Each locality will be able to determine if they want individual public meetings.



Appendix D: Meeting Documentation

CVPDC Hazard Mitigation Plan Update

Locality Vulnerability Meetings

Lynchburg City

Water Resources Office

525 Taylor Street

Wednesday, February 19, 2020

1:00 – 3:30 pm

Attending

Erin Hawkins, Water Quality Manager, Water Resources

Clay Simmons, Deputy Director, Public Works

Tom Martin, City Planner, Community Development

Jeff Martin, Assistant Director, Water Resources

Greg Poff, Deputy Director, Water Resources

Jonathan Wright, Deputy Chief, Fire Department

Todd Davis, Fire Captain, Fire Department

Ellen Davidson-Martin, IT Administrative Manager, IT

Allison Johnson, GIS Manager, IT

Susannah Smith, Construction Coordinator, Parks & Recreation

Tim Mitchell, Director, Water Resources

Piper VanDePerre, Emergency Programs Specialist, Emergency Services

Amy McDaniel, Deputy Director Emergency Services, Emergency Services

Dan Floyd, Assistant Director Facilities, Lynchburg Public Schools

Melissa Foster, Director, Emergency Services

Bill Bohn, Sobis Inc.

Kelly Hitchcock, CVPDC

Meeting Minutes

1. Introduction

Hitchcock welcomed participants, provided a brief background and introduced Bill Bohn.

2. Locality Hazard Vulnerability Review

Bill Bohn, Sobis, Inc., provided a brief overview of his background in mitigation planning and led attendee introductions. Bohn facilitated the vulnerability meeting and presented locality-specific data and vulnerability for primary hazards. The following reflects key discussion points from the data review and hazard discussions.

Flood

Bohn presented flood vulnerability data; including key critical facilities in the flood zone for review/discussion.

- Wastewater Treatment Plant: Gregg Poff noted designed to be out of the 110yr. Processors elevated above the 100yr; impacted by 500 yr. Poff noted the City is process of approximate \$50million upgrade – will provide a summary of key elements and consideration for HMP. Bohn noted that mitigation program can potentially provide funding; important to include elements of upgrades within HMP.



Appendix D: Meeting Documentation

- AEP facility. Bohn questioned City/AEP communication. While not specific mitigation funding can be provided to private company; understanding of impact zone and what activities can be undertaken to minimize impact. Opportunity for communication/impact at critical facilities with power outage.
- Amazement Square – importance of communication and assurance of evacuation procedures in public facilities.
- Bohn noted some localities execute buyout programs in key sensitive area. Studying or developing can be included. The City does not currently have a buyout program.
- The importance of protection from chemicals located in flood zone was discussed. It was noted that Griffin Pipe, Foundry, Westrock all submit Tier II reports. A potential focus would be prioritization of Buncher Rail Car.
- The importance of the rail line protection and the old tunnel/channel was noted.
- Bohn presented data that showed about 22% of city rental population is located in the flood zone (100, 500 & some dam inundation zone). While property owners know the information, rental residents may not. He noted sharing information regarding flood insurance, and the lower rate for flood insurance when in a dam zone vs floodplain education/outreach a good strategy.
- Bohn noted data indicated that there are 149 out structures (eg sheds) located in the flood zone. Bohn noted two strategies can be 1) general education/outreach for placement and elevating of chemicals in existing structures and 2) some localities implement new permit/location requirements for new structures <250 sq ft.
- Bohn asked development in the City can take place in floodplain filled areas. Tom Martin noted the City has the “no net rise” provision and does require confirmed map provisions from DCR. Martin noted that the City does discourage and noted recent development council decision based on flood changes.
- Erin Hawkins noted that the Water Resources Dept is looking at stormwater design standards, focus efforts on known stormwater impacted areas to target mitigation practices.
- Bohn noted that he has worked with communities that have executed rainwater harvesting and other green infrastructure practices. Asked if there are any specific plans for these types of activities.
- Tim Mitchell noted that in the CSO Long Term Control Plan did an extensive evaluation of green infrastructure practices and the modeling showed, generally, not cost effective to meet the TDML reductions. Bohn noted that HMP funding can be used to coordinate between programs and that FEMA mitigation funds can be used to potentially fund the difference. Hitchcock noted that in the HMP general wording, executing green infrastructure and coordinating with infrastructure improvements is noted.

Lynchburg Flood Mitigation Strategies

- Provide targeted flood insurance, dam inundation information to lower basin businesses, residents.
- Coordinate communication with AEP to establish impact zones in the City from power outages, especially in lower basin.
- Communicate with managers/owners public spaces (eg Amazement Square) importance of emergency evacuation and communication process.
- Develop targeted communication with business/industry in flood zone with chemical/potential hazardous material storage information.



Appendix D: Meeting Documentation

- Establish property evaluation, flood zone information to residents to discourage outbuildings in flood zone; include information on chemical storage in existing structure.
- Post information on City website of flood zone; include out building information.
- Consider future ordinance requiring permit for new outbuildings.
- Implement stormwater design standards; target mitigation practices in areas with recurring stormwater impacts.
- Include streambank stabilization to protect city infrastructure, trails, park/public spaces – public investment.

Lynchburg Flood - Follow Up Actions

- Hitchcock/Bohn obtain more detailed information regarding the City's water/wastewater system improvement plan.
- Hawkins will provide summary of water resources activities.

Dams

Bohn presented information on the High Hazard Dams (HHD) in Lynchburg. He noted data provided by DCR and the City has three (3) HHD.

- Bohn noted that included with each HHD map is the sunny day and the worst case Probable Maximum Flood (PMF) breach inundation zones.
- Wyndhurst is currently updating its Emergency Action Plan (EAP).
- It was noted that DCR is looking at starting EAP will all dam/inundation areas; also, they will have all the dams accessible via through their website.
- Melissa Foster noted her department participates in the dam exercises; noted that outreach to residents would be a valuable HMP/department activity.
- Tim Mitchell noted that the City is undertaking evaluations and that DCR is responsible for providing the dam safety evaluations.
- It was recognized that a data gap evaluation of all the resources, critical facilities, and warning communication for the dam inundation zones should be included in the HMP.

Lynchburg Dam Mitigation Strategies

- Establish flood inundation zone public information.
- Develop flood inundation zone study to evaluate/gather data that will include communication/facility details for critical facilities.
- Ensure coordination between departments regarding EAP and emergency exercises for HHD inundation zones.

Urban Fire

Bohn presented map/data presenting dense city areas with older buildings.

- Bohn questioned if there were specific neighborhoods to study/identify regarding sensitive, fire potential or know to have higher percentage of fire incidences.
- It was not there are not specific are fire plans.
- Bohn asked if there are areas with large construction projects. He noted building are vulnerable during construction for fire events.
- It was noted that during construction permits for large structures the Fire Marshall reviews/approve plan. Providing fire safety best practices to developer and department coordination during this time represents a mitigation strategy opportunity.



Appendix D: Meeting Documentation

- It was noted the City maintains its property maintenance violations/property owner communication. Targeted fire prevention and compliance activities represent mitigation activities.
- The City is working on developing building rating layers to let emergency know what to expect in responding to emergencies. Melissa Foster stressed the value of this data and expanding departmental/agency aid relationships.

Lynchburg Urban Fire Mitigation Strategies

- Establish fire safety best practices information to be distributed to developers during the permit/approval process .
- Target fire property protection and property violation notices to property owners in older/dense areas and owners of vacant/derelict properties.
- Develop a coordinated GIS property rating data layer; establish coordinated communication protocol to City departments.

Wind

Bohn provided high and rotational wind data. Noted the area does not have high incidence but recognized derecho and tornado events over the last few years.

- Bohn noted hurricane strips are inexpensive and effective mitigation practice that can be easily installed during construction; having these devices can reduce insurance rate.
- Providing information to the public regarding property evaluation (eg trees, outside furniture) and wind best practices.
- It was noted that the city does not have a designated CERT program but does have an Emergency Operations Plan that include volunteer coordination, donation process, public coordination program that incorporates many of the CERT program activities.

Lynchburg Wind Mitigation Strategies

- Develop wind building mitigation best practices document; provide to developers, property owners.
- Establish property wind property evaluation public education/outreach.

Storms/Extreme Heat

- Bohn asked about the city shelters, critical facility emergency backup capabilities.
- There are backup generators at pump stations, water/septic facilities.
- It was noted that the schools have backup generators but more for systems (refrigeration, servers). Sandusky has a portable generator.
- Melissa Foster noted there was low cooling center use the last time. Residents did utilize buses, libraries and private businesses for cooling during day light hours.
- Bohn provided a map of cooling centers (Miller Center; Salvation Army) and pointed out the location relative to LMI neighborhoods. Opportunity to utilize community centers; what resources might be needed.
- Dan Floyd noted that the LCS has good communication with Lynchburg to address route adjustments due to weather or general construction. Opportunity for development of designated alternative routes.

Lynchburg Storm/Extreme Heat Mitigation Strategies



Appendix D: Meeting Documentation

- Develop wind building mitigation best practices document; provide to developers, property owners.
- Establish public outreach/education for wind property evaluation best practices.
- Evaluate potential storm/heat readiness/needs for area community centers (eg. generators).
- Evaluate designated LDC bus alternative routes.
- Provide backup generators at schools and community centers.

Earthquakes

- Bohn noted earthquakes not a high probability hazard in our region.
- Bohn noted that older, masonry buildings are more negatively impacted by earthquakes; provided a list of older buildings. Noted many older buildings been renovated/added but, original structure there. Identifying original masonry areas and ensuring not used as a holding location is a earthquake mitigation activity.

Lynchburg Storm/Extreme Heat Mitigation Strategies

- Develop wind building mitigation best practices document; provide to developers, property owners.
- Establish public outreach/education for wind property evaluation best practices.
- Evaluate potential storm/heat readiness/needs for area community centers (eg. generators).
- Evaluate designated LDC bus alternative routes.
- Provide backup generators at schools and community centers.

Other

Bohn asked if there were any other general hazard discussion.

- Erin Hawkins noted that community resiliency is becoming a standard evaluation element within water resources and noted that pending wording regarding resiliency services within engineering RFPs being explored.
- How invasive species were going to impact City trees, provided emerald ash bore, and the need for evaluation and replacement over time.

3. Confirmation Next Draft Plan Completion Steps

Hitchcock noted that meeting summaries would be provided. HMP Public Meetings will be held during April, Hitchcock will communicate with each locality to determine schedule and if they want a public meeting. Draft HMP is anticipated for VDEM/FEMA submittal in May and will be brought back to localities during the summer for approval/adoption.

Hawkins thanked participants. She and noted that she and Piper will be communicating with folks to review mitigation strategies and urged folks to contact her or Kelly for any suggestions.

The full Draft CVPDC HMP would be submitted to VDEM and FEMA in May.



Appendix D: Meeting Documentation

CVPDC Hazard Mitigation Plan Update

Locality Vulnerability Meetings

Bedford County, Bedford Town

Bedford County Dept. of Fire & Rescue Headquarters

1185 Turning Point Road, Bedford

Monday, March 9, 2020

1:00 – 3:00 pm

Attending

Wyatt Woody, Director Parks & Recreation, Bedford County

Mac Duis, Chief Operations Officer, Bedford County Public Schools

J.P. Morris, Assistant Resident Engineer, VDOT – Bedford Residency

Ralph Lawson, Disaster Program Manager, American Red Cross

Pam Bailey, Marketing & Business Development Coordinator, Bedford County EDA

Mary Zirkle, Economic Development Coordinator, Town of Bedford

John Moore, Battalion Chief, Bedford County Fire & Rescue

Nathan Carroll, Assistance Executive Director, Bedford Regional Water Authority

Michael Bailey, 1st Sergeant, Virginia State Police

Jeff Johnson, E-911 Manager, Bedford County

Shannon Walker, Lieutenant, Bedford Police Department

Jack Jones Jr., Chief of Department, Bedford County Fire & Rescue

Andy Crawford, Director, Bedford Dept. of Social Services

Bill Bohn, Sobis Inc (consultant partner with VT-CGIT)

Kelly Hitchcock, Central VA Planning District Commission

Meeting Minutes

1. Introduction

Hitchcock welcomed participants, provided a brief background and introduced Bill Bohn.

2. Locality Hazard Vulnerability Review

Bill Bohn, Sobis, Inc., provided a brief overview of his background in mitigation planning and led attendee introductions. Bohn facilitated the vulnerability meeting and presented locality-specific data and vulnerability for primary hazards. The following reflects key discussion points from the data review and hazard discussions.

Flood

Bohn presented flood vulnerability data for Bedford.

- Three pump stations were noted to be in the floodplain. Nathan Carroll noted that Woodfield pump station did have some history of flood impacts. Further, it was noted there is a need for streambank clearing and potential stabilization at the Orange Street (#3 pump).
- Carroll noted that he had a system summary and will provide the summary to Hitchcock/Bohn.
- Carroll indicated that he is aware of only 1 facility – in the Forest area – that may be updated soon. The Montvale Treatment Plant, Bohn noted is in the floodplain, is not known to have had flood impacts. Carroll is not aware of any hardening plans currently in place.



Appendix D: Meeting Documentation

- Two of the Town's electric substations are in the floodplain. Mary Zirkle indicated the team should contact John Wagner, Director of the Electric Dept., to ask about any known problems or plans.
- Bohn noted, as would be expected, the AEP hydroelectric plant, is in the floodplain. Bohn noted formalizing communication and confirmation of flood capacity and plans should be included in the hazard mitigation review process.
- Georgia Pacific plant is in the floodplain. It was confirmed that GP does submit Hazardous Material summaries to the community. John Moore, Bedford County Fire & Rescue, noted that plans were currently underway in Bedford that included working with Georgia Pacific regarding emergency strategic planning and response to any hazardous that would enter the James in a flood event.
- Bohn noted that data was pulled for structures in the 100 & 500 yr flood events. It was noted not too many homes in the floodplain, however there are a number of sheds & secondary building in the floodplain; structures which often include chemicals. Community education and outreach for elevation of structures.
- Bohn noted residential structures in the dam inundation zone. An action that can be taken is to include education and outreach to families, including renters, that regular insurance will not cover flood and that folks can get lower flood insurance when obtained in the dam zone.
- Location of campgrounds was reviewed as it relates to providing safety information. Bohn noted there were not public campgrounds in the flood zones but there are some private ones. Opportunity to reach out and provide general safety and awareness information as a mitigation activity.
- It was noted Bedford does not have schools or other essential community facilities in the floodplain.
- Bohn noted the growth areas designated for the Bedford community and asked if there were any other growth areas not included in the identified areas.
- Bohn asked about any areas, especially within the Town or county density areas, that experience stormwater flooding. South Bridge Street, West Gate/500 block of Blue Ridge Avenue, Summit & 4th Street/Train Trestle areas all experienced regular stormwater/drainage problems. Stormwater around the train trestle has resulted in washed out areas. Address stormwater in these areas should be included in the HMP.
- Mac Duis noted that some of the schools have generators, but the use is primary for backup for essential systems. Most are not equipped with generators for building shelter capacity. Duis noted that Big Island is quite isolated, and lack of power requires, on accusation, for students to be sent home.
- Montvale school water is provided though a private provider. It was noted this area of the County has limited backup water capacity – for the school, fire capacity and economic development.
- Bohn questioned the general practice for expansion of services by the water authority. Carroll noted there were a range of practices that included seeking to purchase from an existing provider and also a private provider requesting to be acquired by the authority. It was agreed that throughout areas of the County there is a need for water capacity redundancy and this should be included in the HMP.
- Water capacity to respond to fire needs was discussed. Hydrant review and capacity, from installation in known areas to an evaluation study should be included in the HMP.



Appendix D: Meeting Documentation

Bedford Flood Mitigation Strategies

- BCWA system protection/hardening strategies – developed through communication with BCWA – to protect key system facilities and essential infrastructure.
- Communicate with VDOT and railroad to instigate stormwater retrofits around the 4th Street trestle area and replacement of undersized culverts in South Bridge Street, Blue Ridge Avenue, and Summit within the Town.
- Establish emergency response plans and agency coordination with companies within floodplain areas of the County/Town (eg Georgia Pacific).
- Initiate public outreach campaign on information regarding flood insurance.
- Initiate water supply redundancy studies and, where appropriate, implementation at essential facilities.
- Obtain generators for community critical facilities, including schools and government buildings.

Bedford Flood - Follow Up Actions

- Hitchcock follow up with Nathan Carroll, BRWA, for facility summary information and discussion of BRWA mitigation plan initiatives.
- Hitchcock/Bohn follow up with Zirkle, Lieutenant Walker for confirmation of stormwater areas in the Town.
- Hitchcock/Bohn follow up with Town/County for wording regarding hydrant needs or hydrant study wording.

Dam Failure

Bohn presented a map that presented dams, including the several High Hazard Dams (HHD) in the County.

- Bohn noted that the inundation areas and Emergency Action Plans (EAPs) were provided by DCR. DCR data included impacted properties.
- Bohn noted there are no public critical facilities – schools, hospitals, elderly centers – in the inundation zones. Bohn suggested a general flooding information, outreach and insurance education be included. He noted that some communities are providing the information in the public community websites/GIS.
- Bohn noted that DCR is about to have dam information on their site and localities can show a link on their sites.
- Chief Jones noted the importance of including all project types and noted past HMP was only looking at emergency management. The plan is looking at all departments, all project types.

Bedford Dam Mitigation Strategies

- Include DCR dam information on locality and regional websites. Incorporate dam public information with in the HMP website and program outreach.

Wildfire

Bohn presented the Bedford wildfire map that included residential density areas and noted those communities that might be cutoff during wildfire events.

- Bohn asked if there are specific plans or development restrictions in wooded areas. There are not specific wooded area development restrictions. Chief Jones noted that the County did coordinate with the Dept. of Forestry to provide Fire Wise property protection best practices and they are provided. Jones noted there is an opportunity to expand and improve the information and outreach component.



Appendix D: Meeting Documentation

- Bohn asked about the local emergency notification system and what percentage of the community is on the system. Jeff Johnson noted the participation in the notification system is a fairly small percentage. Johnson will provide information on the numbers. Increasing participation should be a mitigation activity. It was noted that many folks are registered to receive emergency notices through local news networks.
- It was noted that the School system has an app that provide snow and weather closure information.
- The Town's emergency warning system, which is a horn on a tower, does not currently work. Implementing warning notification system would be a valuable strategy for the plan. Are there plans in place - such as. Emergency notification system – what percentage on the system. Small population on the local emergency system. Folks are more logged into news notification.

Bedford Wildfire Mitigation Strategies

- Expand fire wise, property protection and other information to guide development decisions.
- Develop outreach to increase participation/registration to the local emergency warning system.
- Repair existing or install a new emergency warning system in the Town.

Bedford Wildfire Follow Up Actions

- Hitchcock follow up to obtain estimate of existing Bedford Emergency System registrants.

Tornado and other winds

Bohn provided summary of wind data and noted data pulled were local attractions – places where there is potential for large gathering.

- Bohn asked if locations, like the D Day Memorial had known sheltering plans.
- Other attractions noted included Peaks of Otter, Popular Forest, Bedford Welcome Center. Smith Mountain Lake, all the local parks. No specific sheltering plans for these locations were noted.
- Chief Jones pointed out that events are held at all the locations. He pointed out that as permits are issued all the departments are informed and provide comment. Emergency access are included. He noted this is the opportunity to include some specifics in this process.
- Bohn presented data on mobile home parks, residential clusters and noted the value of brackets for wind protection and the ability to expand information/outreach to builders. He noted that with confirmation on us of the roof structure brackets reduction in insurance premiums can be obtained.

Bedford Tornado/High Wind Mitigation Strategies

- Incorporate recommendations/review for weather event sheltering or actions within event planning & permitting process.
- Through coordination with property and event owners and rescue/emergency professionals, evaluate or develop emergency plans.
- Develop wind property protection information materials for property owners, developers, builders.

Extreme Temperatures

Bohn noted the plan will include temperature data and will include evaluation/strategy to mitigate impacts of extreme temperatures.



Appendix D: Meeting Documentation

- It was noted that the County and Town do not have designated cooling centers. However, local churches serve this role, on a case-by-case bases. Public libraries and other public spaces, shopping, etc. are places public congregate during extreme heat or power outages.
- Water sources for the agricultural community were noted; Hitchcock confirmed she has communicated with the Extension agents on unique needs for this community.

Other Hazards

Earthquakes:

Bohn noted not prevalent in the area. However, he noted one data set identified was older buildings with unreinforced masonry structures. Bohn noted these types of buildings are most susceptible from earthquake impacts. A strategy being letting facility managers of these facilities, many of which have been built around/expanded, know this and ensure the original structure identified and ensure if an event not to have individuals shelter in these locations.

- List of structures was presented. It was noted that the Bedford Middle School is no longer a school. Was the building that had suffered a recent fire and is being redeveloped into private residential property.

General Discussion

Bohn asked for any general discussion or other hazard concerns.

- The importance of including a strategy to address stormwater runoff and its impact needs to be in the plan. To include communication with all the stakeholders.
- It was noted that there is current communication and team building on disease response in the community. It is anticipated that actions or future needs will result from this meeting that should be included.
- Chief Jones reiterated the need for communication with Extension and the importance of looking at the timber industry and impact of drought. Also stressed the importance of departmental coordination in emergency response and mitigation execution activities.
- Carroll agreed that the impact of drought and extreme temperatures on the Agricultural community can be an issue. He noted that the BCWA in the past had been approached by a farmer to request water release from a reservoir to address loss of water on property.
- Mary Zirkle stresses that the HMP should be sure to accurately reflect adjustments in the Town boundaries.
- Carroll noted he was aware of water restrictions in 2017 that were more in place based on withdrawal restrictions, not due to lack of capacity. He pointed out that a lot of water use is required for system flushing, which in some areas could be impacted with reduced capacity.

Bedford General Follow Up Actions

- Communicate with Duis, County, Town to see if any specific mitigation actions should be included as a result of pending disease response meetings.
- Ensure communication with extension and agricultural mitigation activities are incorporated.

3. Confirmation Next Draft Plan Completion Steps

Hitchcock noted that meeting summaries would be provided. Also that the CVPDC HMP Technical Advisory Group, whom Chief Jones is a member, will meeting monthly through plan completion. HMP Public Meetings will be held during April, Hitchcock will communicate with each locality to determine schedule and if they want a public meeting. Draft HMP is anticipated for VDEM/FEMA submittal in May and will be brought back to localities during the summer for approval/adoption.



Appendix D: Meeting Documentation

Public Meeting Presentation

December 4, 2019 | 5:30 pm – 7:00 pm

The Miller Center

301 Grove Street, Lynchburg

CVPDC Hazard Mitigation Plan Update



The Miller Center
301 Grove Street Lynchburg, VA
December 4, 2019



Hazard Mitigation Planning

- Authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (amended August 2016); requirement for FEMA mitigation funding eligibility.
- Hazard Mitigation plan identify risks and present strategies to lessen risk.
- Hazard Mitigation programs assist communities implement measures before hazards.
- Hazard mitigation is any action taken to reduce or eliminate risks and vulnerability to people or property from natural hazards.
- Mitigation is a KEY process in reducing the cycle of disaster damage, reconstruction and repeated damage.



Hazard Mitigation Assistance (HMA) Grants

- Pre-Disaster Mitigation (PDM)
- Flood Mitigation Assistance (FMA)
- Hazard Mitigation Grant Program (post-disaster)



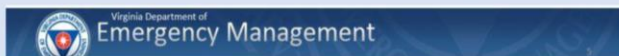
Annual; focused on climate resilience, infrastructure, and non-flood related projects.

- \$90M in FY2018
- Each state \$575K set-aside
- 75% Federal; 25% Local



Annual; focused on mitigation structures with NFIP and have sustained flood claims.

- \$175M in FY2018
- Priority to communities with high NFIP and participating CRC Pgm.
- Up to 100% Federal funding





Appendix D: Meeting Documentation

Hazard Mitigation Planning - Saves

Mitigation is a **KEY** process in reducing the cycle of disaster damage, reconstruction and repeated damage.

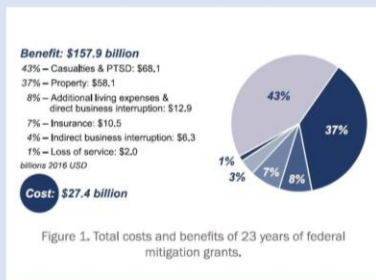


National Benefit-Cost Ratio (BCR) Per Peril		Beyond Code Requirements	Federally Funded
Overall Hazard Benefit-Cost Ratio		\$4:1	\$6:1
	Riverine Flood	\$5:1	\$7:1
	Hurricane Surge	\$7:1	Too few grants
	Wind	\$5:1	\$5:1
	Earthquake	\$4:1	\$3:1
	Wildland-Urban Interface Fire	\$4:1	\$3:1

Source: FEMA Mitigation Saves Study, 2017

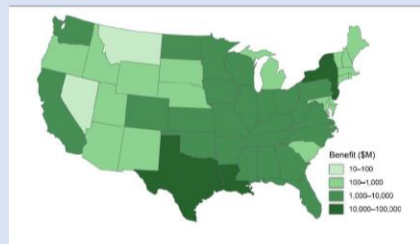


Hazard Mitigation Program - Saves



Total costs and benefits of 23 years of federal mitigation grants

Source: FEMA, 2017



Aggregate benefit by state from federal grants for flood, wind, earthquake and fire mitigation.

Source: FEMA, 2017



Hazard Mitigation Plan

Mitigation	The effort to reduce loss of life and property by lessening the impact of disasters.
HM Plan	Evaluate/understand risks (HIRA) from natural hazards and develop long-term strategies to reduce impacts to people, property, and environment.
Risk	Potential losses associated with a hazard, defined in terms of expected probability and frequency, exposure, and consequences.
Vulnerability	Level of exposure of human life and property to damage from natural hazards.
HM Strategies	Specific actions, projects, policies, or process to reduce or eliminate risk. Implementing strategies to achieve HM mission & goals.

Hazard Categories

1. **Drought** – high temps, well, Agriculture
2. **Fire** – wildfire, urban, sensitive areas,
3. **Flooding** – riverine, flash/street flooding, dam inundation
4. **Geologic** – landslides, earthquakes, karst (sinkholes), drilling
5. **Severe Weather** – ice/snow, tornado, non-rotational wind
6. **Human-caused** – water, electric power failure, information security





Appendix D: Meeting Documentation

CVPDC Hazard Mitigation Plan

HMP Technical Advisory Committee

CVPDC Localities

- Water Resources/Utility
- Emergency Services/Public Safety
- Planning

VA State Agencies

- Dept. Environmental Quality (DEQ)
- Dept. Conservation & Recreation (DCR)
- Dept. of Health – Central VA Health District
- Dept. Mines, Minerals, & Energy

Business/Institutions

- Centra
- Colleges/Universities



Hazard Identification and Risk Assessment (HIRA)

Purpose:

Provides factual basis for prioritizing hazard mitigation activities.

Major Components (Data):

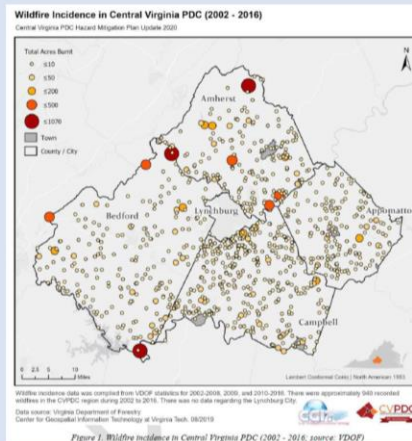
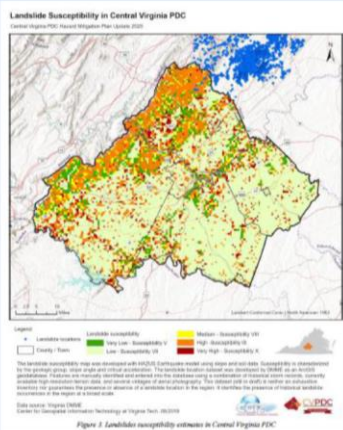
- Identify and profile natural hazards affecting a region (historical data);
- Assess Vulnerability (density, structures, sensitive facilities/communities)
- Estimates Potential Losses (estimated structural values)



Hazard Intensity / Frequency Sources

Hazard	Data Source	New Modeling (Probability) Data?
Flood		
Flooding - Coastal	FEMA Digital Flood Insurance Rate Maps (DFIRMs)	YES
Flooding - Storm Surge from Hurricanes	FEMA Digital Flood Insurance Rate Maps (DFIRMs)	YES
Flooding - Riverine	FEMA Digital Flood Insurance Rate Maps (DFIRMs)	YES
Wind		
Wind - Hurricane	HAZUS Analysis	YES
Wind - Non-Hurricane	SVPDC Data (generated from NWS SevereFest data)	YES
Wind - Tornado	SVPDC Data (generated from NWS SevereFest data)	YES
Earthquake	HAZUS Analysis	YES
Winter Storm	Analysis of National Climatic Data Center Archives	YES

CVPDC HMP - HIRA





Appendix D: Meeting Documentation

HIRA

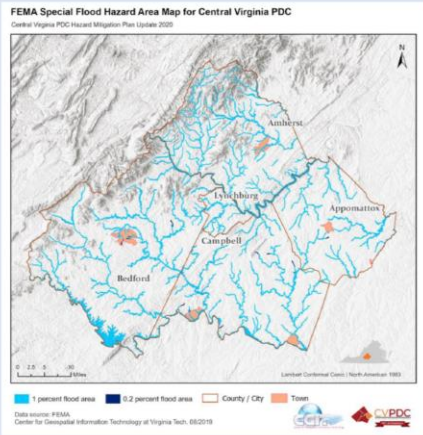


Table 3. Flash Flood Events in the Central Virginia PDC (Source: NCEI database, 1996–2019)

Jurisdiction	No of Flash Flood Events	Property Damage	Crop Damage	Total
Albemarle County*	24	\$ 820,000	\$ 0	\$ 820,000
Appomattox County*	22	\$ 1,189,000	\$ 100,000	\$ 1,289,000
Bedford County*	49	\$ 560,000	\$ 100,000	\$ 660,000
Campbell County*	40	\$ 1,961,000	\$ 500,000	\$ 2,461,000
Lynchburg	11	\$ 18,020,000	\$ 0	\$ 18,020,000

* Towns included in the county numbers



Mitigation Strategies – Five Primary Types

- Public Information & Outreach**
Actions to inform & educate public about hazards & ways to mitigate impact
 - radio/tv spots
 - real estate disclosure
 - preparedness strategies
 - flood/insurance information
 - property evaluation
- Local Plans & Regulations**
Preventative actions via planning, maintenance, regulatory actions (e.g. Comprehensive Plans)
- Property Protection**
Measure to protect structures to better withstand hazards or support to lessen impact (e.g. acquisition, retrofits, relocation).
- Structure Projects**
Lessen impacts through modification of existing or construction new structures (e.g. reservoirs, dam stabilization, storm sewer construction).
- Natural System Resiliency**
Preserve or restore natural systems to preserve function of natural systems to reduce hazard impacts (e.g. streambank stabilization, wetland restoration, fire resistant landscapes, slope stabilization).



Examples of Mitigation Activities





Appendix D: Meeting Documentation

Examples of Mitigation Activities



Public Input – Survey & Public Meeting

Area residents, stakeholders and business community are requested and encouraged to provide input about concerns and feedback on how you and your community prepares to be more resilient from natural disaster impacts.

How to Participate:

1. **Take a Survey:** 6-minute, 14 question survey to provide feedback on natural disaster in your community. Available throughout the region. November 20th – December 13th www.cvpdc.org.
2. **Stay Informed:** Visit the CVPDC website for HMP updates, next public meeting, and Draft CVPDC Hazard Mitigation Plan public comment period.
3. **Ask Questions:** Contact Kelly Hitchcock at kelly.hitchcock@cvpdc.org or at 434-845-3491



CVPDC Hazard Mitigation Plan - Completion Timeline

Activity	Schedule
Public Meeting #1 – Plan & HIRA Intro	December 4, 2019
Community Survey	November 20 th – December 13 th
Mitigation Strategies – region/locality specific	August 2019 – January 2020
Public Meeting #2 – Comment Draft	February/March 2020; Date(s) TBD
Draft Submitted VDEM & FEMA	March 2020
Localities Grant Eligible	March 2020
FEMA Review Draft CVHMP	March – May 2020
FEMA Comments Incorporated	May
CVPDC HMP Approved FEMA	June 2020
CVPDC HMP Adopted Localities	July – September 2020
FEMA HMA Grant Awards (typically)	October 2020





Appendix D: Meeting Documentation

CVPDC Hazard Mitigation Plan

Thank you.
Kelly Hitchcock
CVPDC HMP Technical Advisory Committee



Attendees

The CVPDC Hazard Mitigation Plan Public Meeting

The Miller Center
301 Grove Street, Lynchburg
Wednesday, December 4, 2019

SIGN IN - PLEASE PRINT

Name	Locality	Organization/Citizen	Check to receive future HMP information	Email (needed if you wish future information)
Phyllis Floyd	Campbell Co	citizen	✓	floyd.phyllis@hotmail.com
Bonita Myers-Bigler	Camp. Co	Citizen	✓	BonitaB@aol.com
Laura Henry-Stue	Amherst County	Off of Lynchburg County	✓	henrystue.l@lynchburgva.gov
Kent White	Lynchburg	City of Lynchburg	✓	Kent.white@lynchburgva.gov
Erin Hawkins	COL		✓	erin.hawkins@lynchburgva.gov
Piper VanDePerre	Lynchburg	Emergency Services	✓	piper.vandeperre@lynchburgva.gov
Melissa Foster	Lynchburg	" "	✓	
JEFF MARTIN	Lynchburg	Water Resources	✓	JEFF.MARTIN@lynchburgva.gov
Jennifer Woolfer	Lynchburg	citizen	✓	jennifer@sustainabilityconsulting.com



Appendix D: Meeting Documentation

Public Meeting (webinar format)

June 25, 2020 | 5:30 pm

Hazard Mitigation Plan Public Meeting

June 25, 2020



Central Virginia Planning District Commission

HAZARD MITIGATION

Agenda



PROJECT
BACKGROUND



HAZARD
INFORMATION



MITIGATION
ACTIONS



NEXT STEPS



Introduction – Who is Involved?

- Local government – emergency management, public works, water resources, community development, police, fire, and governing bodies.
- Region Planning District Commission – CVPDC
- Federal and State government – FEMA; Dept. of Emergency Management; Dept. of Conservation and Recreation; and Dept. of Mines, Minerals, and Energy.
- Colleges and universities
- Non-profit and private sector
- You!





Appendix D: Meeting Documentation

Introduction – Why Are We Here?

- The Region has a Federal Emergency Management Agency (FEMA) approved Hazard Mitigation Plan (HMP) which must be updated every five years. Public meetings are part of this process.
- The HMP provides a process to help local government agencies identify hazard risks and strategies to protect people and property.
- Some grant funding requires an approved HMP with specific mitigation actions defined.

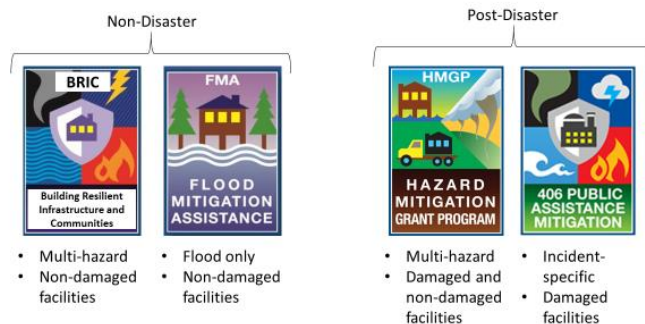


The Disaster Mitigation Act of 2000

- Revitalized federal planning requirements – State and Local Hazard Mitigation Plans
- Provides Federal Grant Funding Eligibility
 - Hazard Mitigation Grant Program (HMGP)
 - Pre-Disaster Mitigation Program (PDM)
 - Flood Mitigation Assistance (FMA)
- Supports cooperation between state and local authorities on risk reduction measures and expedites funding allocation



FEMA Grants





Appendix D: Meeting Documentation

FEMA Can Assist With:

- Property acquisition
- Structure demolition or relocation
- Structure elevation and reconstruction
- Dry flood proofing on historical and non-residential structures
- Flood risk reduction projects
- Emergency generators



What's in the Mitigation Plan?

- Community profiles – demographics, employment, growth areas, natural environment, and built environment
- Hazard information and risk assessment – natural, human-caused, and technological hazards
- Mitigation goals, objectives, and actions
- Maintenance strategies – maintenance plan for the next five years

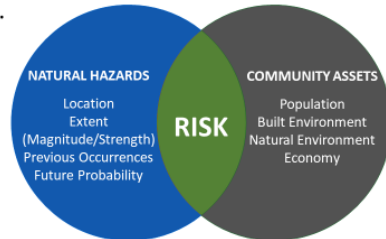




Appendix D: Meeting Documentation

What is Risk?

- The potential for damage, loss, or other impacts created by the interaction of natural hazards with community assets.



Source: Local Mitigation Planning Handbook, FEMA 2013.



Hazard Section of the Plan

- Hazard description
- Geographic location and extent of hazard
- Magnitude and severity
- Previous occurrences
- Relationship to other hazards
- Vulnerability and risk
- Impacts – social, economic, and environmental



Which Hazards are Covered?

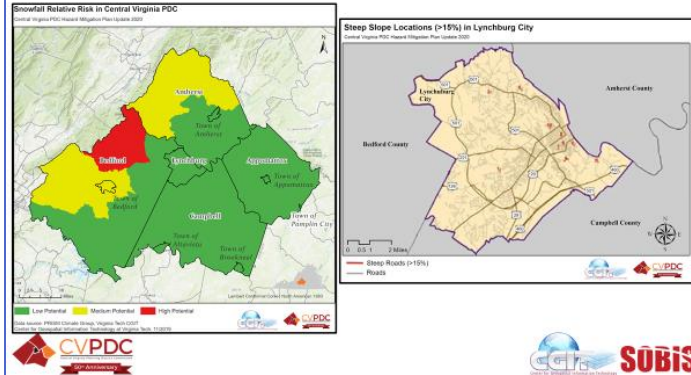
- | | |
|------------------------|-----------------------------------|
| • Flood | • Urban Fire |
| • Dam Failure | • Landslide |
| • Severe Thunderstorm | • Earthquake |
| • Tornado | • Land Subsidence and Karst |
| • Hurricane | • Terrorism |
| • Hailstorm | • Hazardous Material Incidents |
| • Severe Winter Storm | • Solar Event |
| • Extreme Temperatures | • Contagious/Communicable Disease |
| • Fog | |
| • Drought | |
| • Wildfire | |



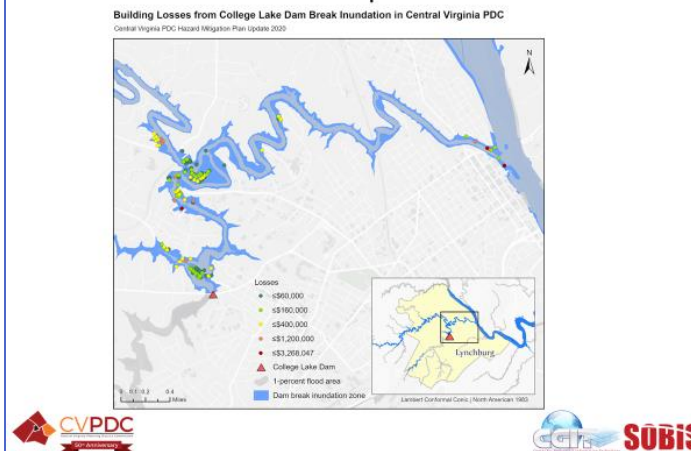


Appendix D: Meeting Documentation

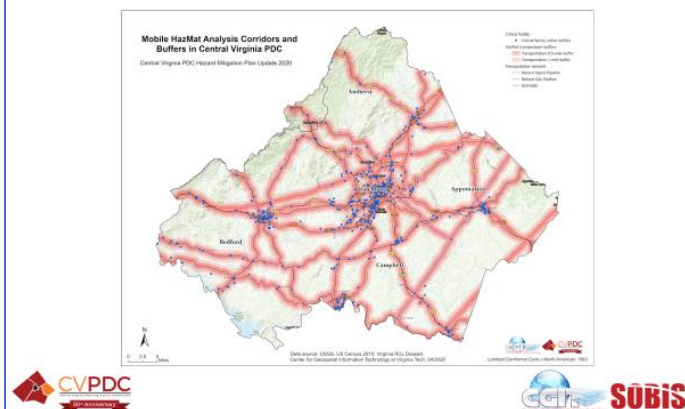
Winter Storm Example



Dam Failure Example



Hazardous Materials Example





Appendix D: Meeting Documentation

Who is Impacted?

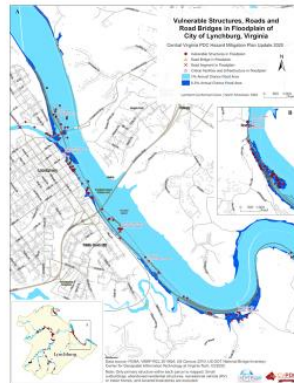
	Population	Households	White	%	Black	%	Hispanic	%	Asian	%	Native Am	%
Bedford County	68,676	27,465	62,035	90.3%	3,909	5.7%	1,090	1.6%	700	1.0%	172	0.3%
1% Floodplain	9,443 (13.8%)	3,965	8,562	90.7%	481	5.1%	160	1.7%	88	0.9%	20	0.2%
0.2% Floodplain	12,129 (17.7%)	5,162	10,825	89.2%	789	6.5%	196	1.6%	105	0.9%	36	0.3%

	Population	Households	Income <\$20k	%	Age <16	%	Age >65	%
Bedford County	68,676	27,465	3,914	5.7%	15,305	22.3%	11,147	16.2%
1% Floodplain	9,443	3,965	646	6.8%	1,969	20.9%	1,672	17.7%
0.2% Floodplain	12,129	5,162	854	7.0%	2,392	19.7%	2,467	20.3%



What is Impacted?

- Hospitals, schools, and retirement communities
- Police, fire, and emergency operations centers
- Roads and rail
- Utilities
- Hazardous materials facilities
- Tourist sites and large venue facilities



Dashboards





Appendix D: Meeting Documentation



What is Mitigation?

- Merriam-Webster
 - (1) to cause to become less harsh or hostile
 - (2) to make less severe or painful
- FEMA – Any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards.



Types of Mitigation

- Property protection – buyouts, relocation, warning systems, etc.
- Capacity – plans, ordinances, zoning, training, Community Rating System, etc.
- Structural projects – flood control, dam stabilization, green infrastructure, berm installation, etc.
- Public outreach and information - education campaigns, websites, demonstration events, etc.
- Natural system resiliency - streambank and slope stabilization, fire resistant landscapes, wetland restoration, etc.





Appendix D: Meeting Documentation

Region's Goals

- Support property and infrastructure fortification programs and projects to lessen hazard impacts to lives, property, and infrastructure.
- Through governmental operations, planning, voluntary and regulatory programs (e.g. code enforcement), and maintenance practices lessen hazard impacts.
- Execute hazard mitigation measures that significantly lessen the impact of natural hazard impact to lives, communities, property, and infrastructure in the region.



Region's Goals

- Increase public hazard awareness and preparedness knowledge to lessen hazard impacts on individuals, property, and businesses.
- Preserve the function and resiliency of the region's natural resources and sensitive landscapes.



Region Undergoing Hazard Mitigation Plan Update

The CVPDC has contracted with the Virginia Department of Emergency Management (VDEM) and area localities to update the region's Hazard Mitigation Plan update. The plan that will identify and rate potential hazards and estimate hazard and locally specific mitigation activities to reduce human and property impact. Funding for this project is provided by VDEM, FEMA, and CVPDC localities.

The CVPDC has contracted with the Virginia Tech Center for Geospatial Information Technology (CGIT) to guide the pre-disaster planning effort. The CGIT team, which includes contributions by SOBIS, Inc. in partnership with the Hazard Mitigation TAC will coordinate to develop the pre-hazard mitigation plan.

[Hazard Mitigation Plan Update: A Public Input Strategy](#)

A Technical Advisory Committee (TAC) comprised of local and state emergency planning, resource management professionals, business, college, agency, and VDEM staff, and local citizens will coordinate to review and evaluate data, develop strategies, and guide the plan development. The pre-disaster plan will be developed through a public process.

[Public Meetings Schedule: June 2020](#)

Participate to learn about the pre-disaster plan, hazard data and resource information for our area, review draft regional mitigation strategies, and learn how to view and provide comment.

[Draft Regional Hazard Mitigation Strategies](#)

These represent a summary of a menu of mitigation strategies, that can serve as the foundation by which area localities will estimate individual locality mitigation actions. Residents may provide comments on the plan, strategies, and mitigation strategies by July 31, 2020.

[CVPDC Hazard Mitigation Plan Draft Plan & Strategy](#)

The Draft CVPDC Hazard Mitigation Plan website will be [open to the public in late July](#). Please check back at this page at that time for updates. The CVPDC HMP website will allow for interactive viewing of the full draft plan and individual chapters, regional hazard data and vulnerability maps, the planning process, the regional and individual locality pre-disaster mitigation strategies, and the planning overview and guidance process. Individual hazard maps, data.

[Learn More About Hazard Mitigation Planning](#)

Federal Emergency Management Agency (FEMA)

<https://www.cvpdc.org/regional-initiatives/hazard-mitigation.html>





Appendix D: Meeting Documentation

CVPDC Hazard Mitigation Plan Completion Schedule & Public Participation Process

Activity	Schedule
Public Meeting #1 – Plan & HIRA Intro	December 4, 2019
Community Survey	Nov. 20 – Dec. 13, 2019
Mitigation Strategies – Region/Localities	October 2019 – June 2020
Public Meeting #2 – Hazard Review & Strategy Comment	June 2020
Draft CVPDC HMP Plan available for public comment	July 2020
Draft HMP Submitted VDEM & FEMA	July 2020
FEMA Review Draft CVHMP	August – September 2020 (localities able to submit applications)
FEMA Comments Incorporated	September 2020
CVPDC HMP Approved FEMA	September 2020
CVPDC HMP Adopted Localities	September – October 2020



Mitigation for Homeowners and Businesses (Flood/Dam Failure)

- Buyout the property (pre-flood market value)
- Elevate the property (\$30k-\$100k)
- Dry flood-proofing (\$8k-\$20k)
- Wet flood-proofing (\$2k-\$20k)
- Stormwater management
- Insurance (risk transfer)



Dry Flood-Proofing

- Dry flood-proofing techniques are designed to prevent floodwater from entering a building.
- Measures include the protection of doors and other openings with permanent or removable flood shields by sealing walls with waterproof coatings, impermeable membranes, or supplemental layers of masonry or concrete.

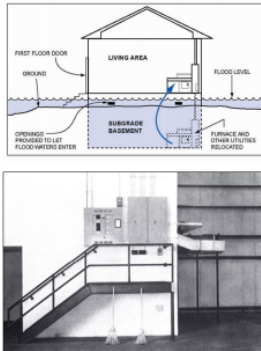




Appendix D: Meeting Documentation

Wet Flood-Proofing

- Wet flood-proofing measures allow floodwater to enter a building but limit the damage to the structure and its contents.
- Measures include building utility installations above flood levels, raising electrical sockets, fitting tiled floors so that the building can quickly be returned to use after the flood, and sealing walls with water-resistant building materials.



Stormwater Management

Bioretention/ Raingarden



Planter Box



Rainwater Harvesting

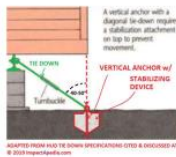


Green Roofs



Mitigation for Homeowners and Businesses (Wind)

Anchoring



Hurricane Straps



Shutters



Secondary Water Resistance





Appendix D: Meeting Documentation

More Information from FEMA

- https://www.fema.gov/media-library-data/1478272128411-2eca27a89d418bb73e817edfb702cc15/HMA_HO_Brochure_508.pdf



Other Information

- <https://www.lynchburgva.gov/emergency-preparedness>



- <https://www.ready.gov/> - creating plans and emergency kits for the public and businesses.



For more information,
please contact:

Kelly Hitchcock, Central
Virginia PDC
Kelly.Hitchcock@cvpdc.org





Appendix D: Meeting Documentation

CVPDC Pre-Disaster Mitigation Plan Public Survey

Central Virginia Pre-Disaster Mitigation Plan Public Survey

Has your home or business been impacted by damage from a natural hazard?

The Central Virginia Planning District Commission (CVPDC) is working with area communities to create a natural hazard pre-disaster plan, or *Hazard Mitigation Plan*, to establish strategies ahead of disasters to lessen the impact to lives and property from natural disaster events. The CVPDC Hazard Mitigation Plan is being developed to lessen the vulnerability of citizens, critical facilities, infrastructure and property to natural disasters.

Advanced thanks for taking about six (6) minutes to participate in this important survey. Your participation will assist in developing the regional pre-disaster plan to make our region more resilient to natural disasters.

1. For this survey, from which Central Virginia Planning District Commission (CVPDC) area participating locality are you responding?

- ☐ Altavista Town
- ☐ Amherst County
- ☐ Amherst Town
- ☐ Appomattox County
- ☐ Appomattox Town
- ☐ Bedford County
- ☐ Bedford Town
- ☐ Brookneal Town
- ☐ Campbell County
- ☐ Lynchburg City



Appendix D: Meeting Documentation

2. Which options below best define your role in the community?

☐ Resident

☐ Business Operator

☐ Landowner

☐ Local Official

☐ Institutional/Organizational Partner

☐ Other (please specify)

3. Please enter your HOME ADDRESS zip code.

4. How concerned are you about the following natural disasters affecting your community? (Check concern level for each hazard)

	Very Concerned	Somewhat Concerned	Neutral	Not Very Concerned	No Concern
Dam/Levee Failure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drought	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Earthquake	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flood (river/stream overflow)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flood (urban street, stormwater/flash)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heat Wave	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High Winds (hurricane, tornado, derecho)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Landslide	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Severe Winter Storm (ice, blizzard)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Source Water Contamination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wildfire	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urban Fire (large fire/conflagration)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

5. Have you been impacted by a natural disaster?

☐ Yes

☐ No

6. Please select the TOP THREE (3) natural hazards you think are the HIGHEST THREAT (likely to cause impact) to your community or neighborhood

☐ Drought

☐ Dam Failure

☐ Earthquake

☐ Erosion

☐ Extreme Temperatures

☐ Flooding (River/Stream)

☐ Flooding (Street/Flash)

☐ Hail Storms

☐ High Winds

☐ Hurricane

☐ Ice Storm

☐ Landslides

☐ Medical Pandemic

☐ Nor'easter Storms

☐ Severe Thunderstorms

☐ Severe Winter Storms

☐ Sinkholes

☐ Tornadoes

☐ Wildfires

☐ Urban Fire (large/conflagration)

☐ Other (please specify)



Appendix D: Meeting Documentation

7. Which of the following natural hazards have you been impacted by in the last 10 years? (check all that apply)

☐ Dam/Levee Failure

☐ Drought

☐ Earthquake

☐ Flood (river/stream overflow)

☐ Flood (urban street/flash)

☐ Heatwave

☐ High Winds (tornado/derecho)

☐ Landslide

☐ Severe Weather

☐ Wildfire

☐ Urban Fire (large fire/conflagration)

☐ I have NOT been directly impacted by a natural hazard

☐ Other (please specify)

8. Have the following types of weather events become more or less common in your community over the past five (5) years, or have they stayed about the same?

	Much Less Common	Somewhat Less Common	Stayed About the Same	Somewhat More Common	Much More Common	Don't Know
Extreme Temperatures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High Wind Events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Severe Thunderstorms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Severe Winter Storms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flooding Events (river/stream overflow)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flooding Events (street/flash or stormwater)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Droughts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. In your household, has anyone done any of the following natural disaster preparedness activities? (check all that apply)

☐ Talked about what to do in case of a natural disaster or emergency.

☐ Prepared an emergency kit or assembled emergency supplies (stored food & water, batteries, etc.).

☐ Installed a smoke detector on each level of your home.

☐ Prepared a family/home emergency plan.

☐ Discussed or created a utility shutoff procedure in the event of natural disaster.

☐ Attended a course, or meeting dealing with emergency preparedness (First Aid, CPR, Get Ready).

☐ Signed up to receive an emergency alert of some kind.

☐ Other (please specify)

10. Have you ever received information on how to make your home or business better prepared for natural hazards?

☐ Yes

☐ No

11. Does your street regularly flood or experience sustained puddling during rain events?

☐ Yes

☐ No

If yes, please provide the street name and information about area that floods/holds water.

12. Is there any supplemental insurance on your property? (check all that apply)

☐ Earthquake insurance

☐ Flood insurance

☐ I do not have earthquake or flood insurance

☐ I don't know

☐ Other (please specify)



Appendix D: Meeting Documentation

13. How do you receive information regarding severe weather events? (check all that apply)

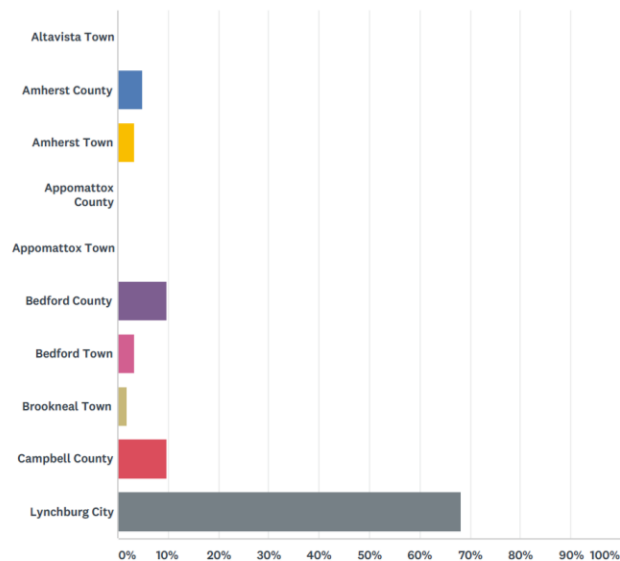
- ☐ Television
- ☐ Radio
- ☐ Cell Phone Service/Apps
- ☐ Social Media (Facebook, Twitter, etc.)
- ☐ Cable TV System Alerts
- ☐ National System (eg NOAA Weather)
- ☐ Other (please specify)

14. Please use this space to provide any questions, comments, concerns regarding natural hazard risks or preparedness.

CVPDC Pre-Disaster Mitigation Plan Public Survey Results

Q1 For this survey, from which Central Virginia Planning District Commission (CVPDC) area participating locality are you responding?

Answered: 63 Skipped: 0

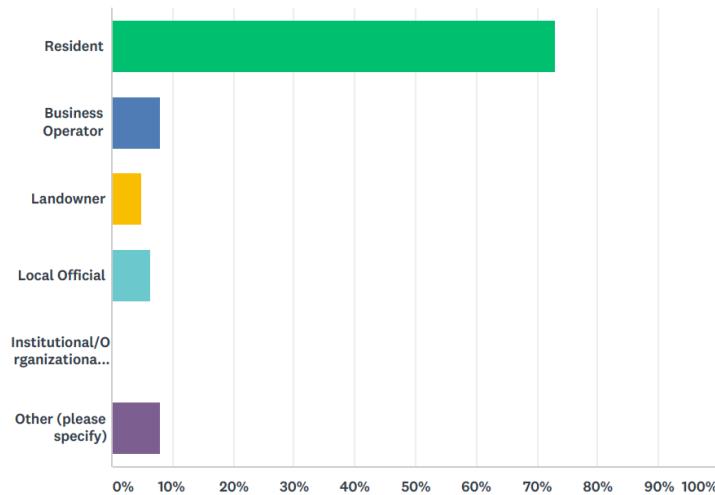




Appendix D: Meeting Documentation

Q2 Which options below best define your role in the community?

Answered: 63 Skipped: 0



Q3 Please enter your HOME ADDRESS zip code.

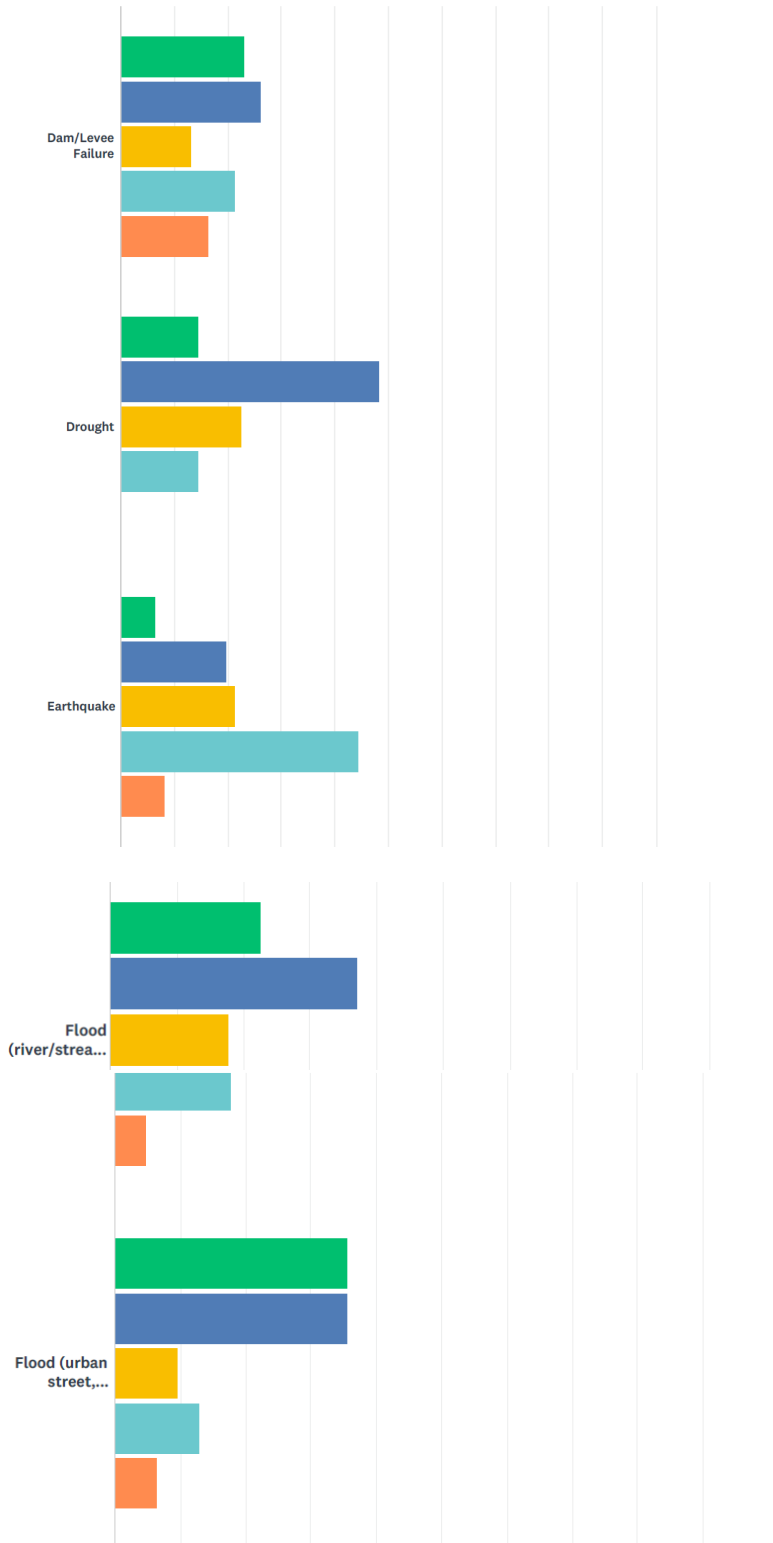
Answered: 62 Skipped: 1



Appendix D: Meeting Documentation

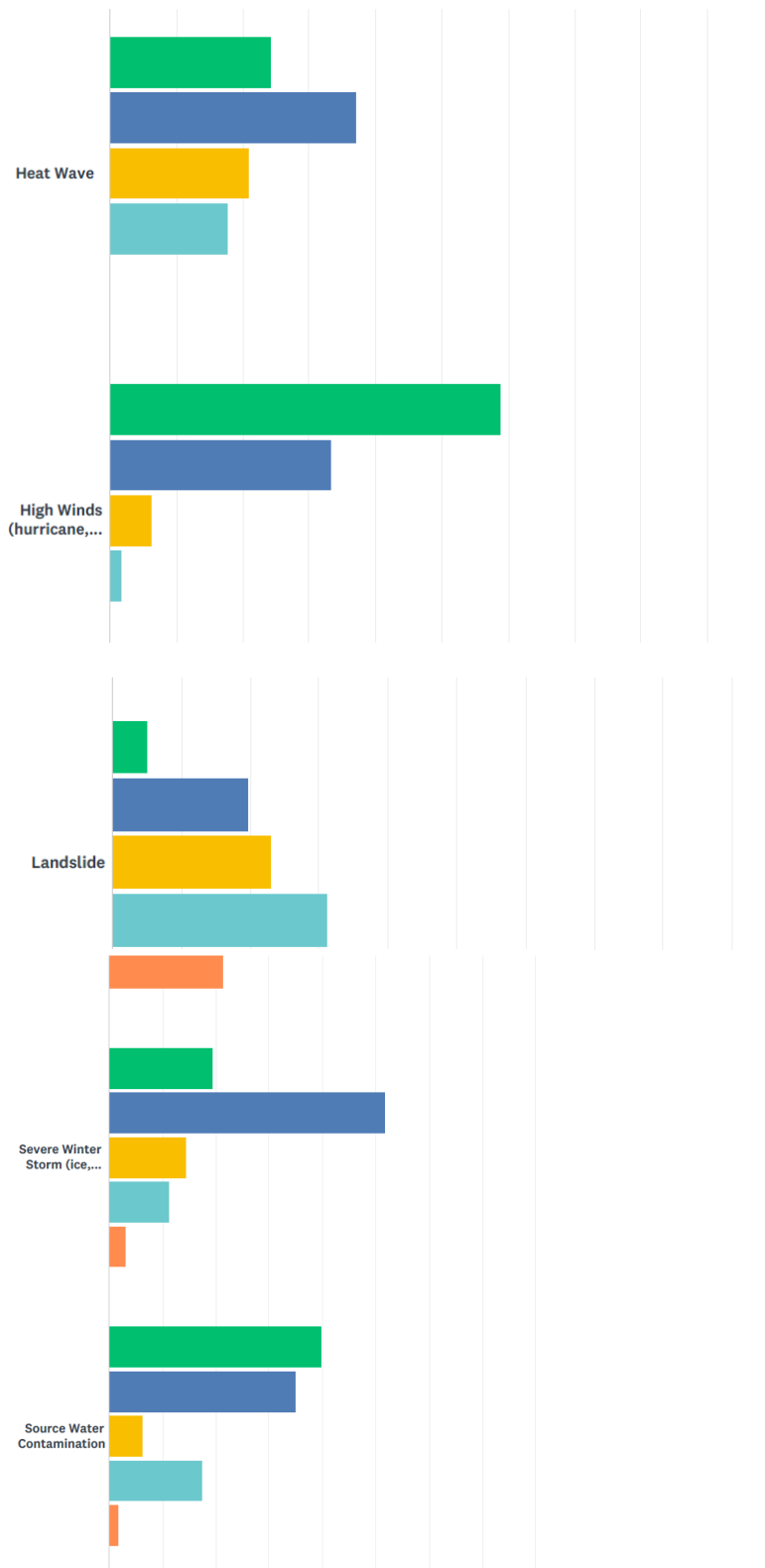
Q4 How concerned are you about the following natural disasters affecting your community? (Check concern level for each hazard)

Answered: 63 Skipped: 0



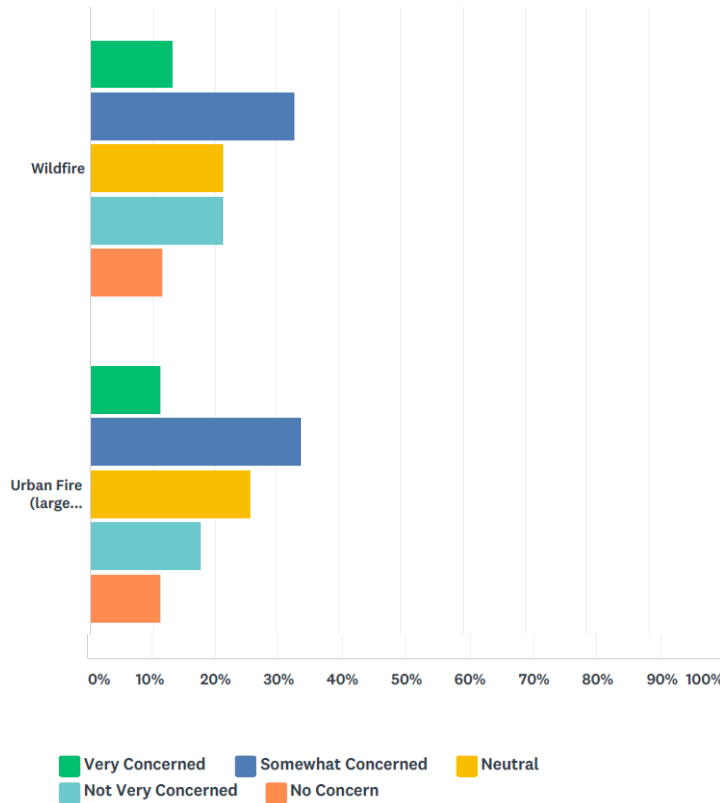


Appendix D: Meeting Documentation



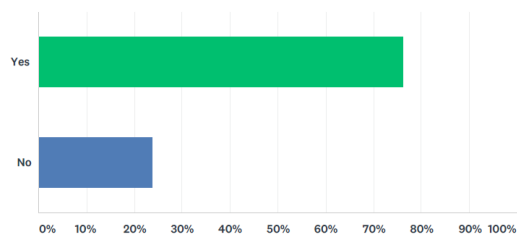


Appendix D: Meeting Documentation



Q5 Have you been impacted by a natural disaster?

Answered: 63 Skipped: 0

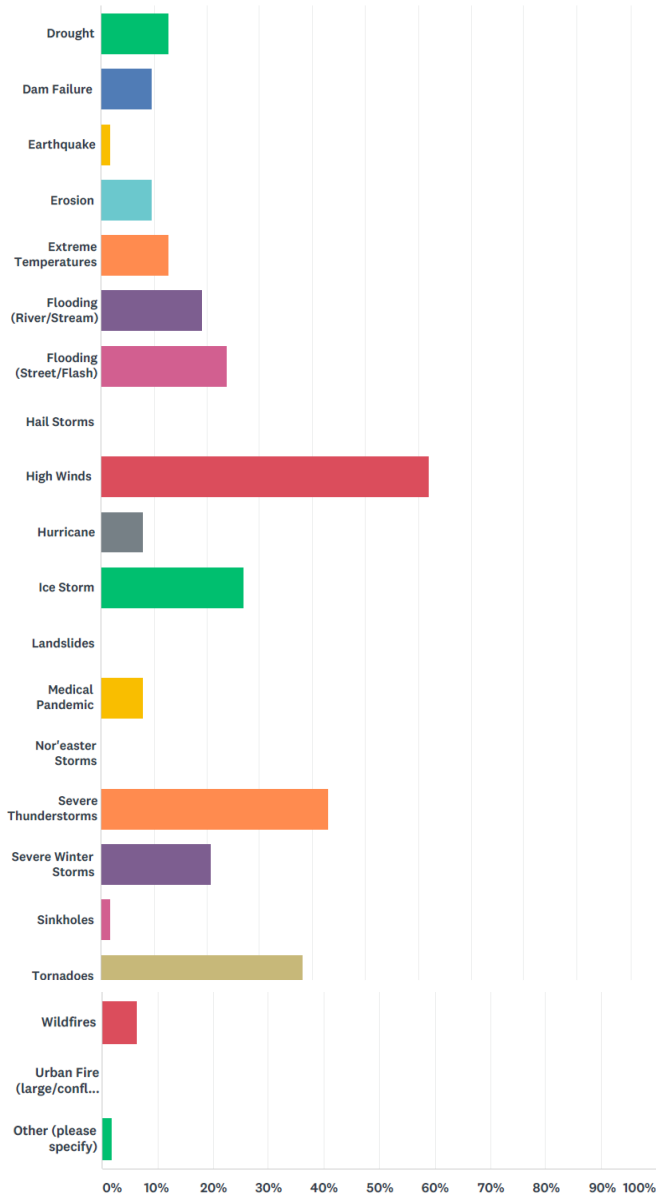




Appendix D: Meeting Documentation

Q6 Please select the TOP THREE (3) natural hazards you think are the HIGHEST THREAT (likely to cause impact) to your community or neighborhood

Answered: 63 Skipped: 0

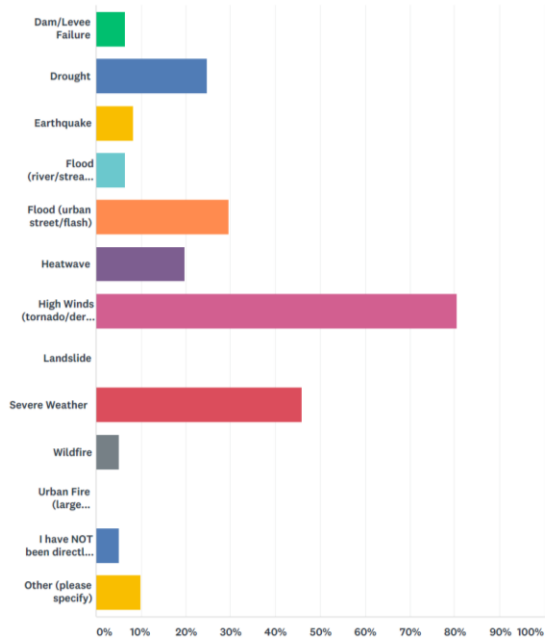




Appendix D: Meeting Documentation

Q7 Which of the following natural hazards have you been impacted by in the last 10 years?(check all that apply)

Answered: 61 Skipped: 2

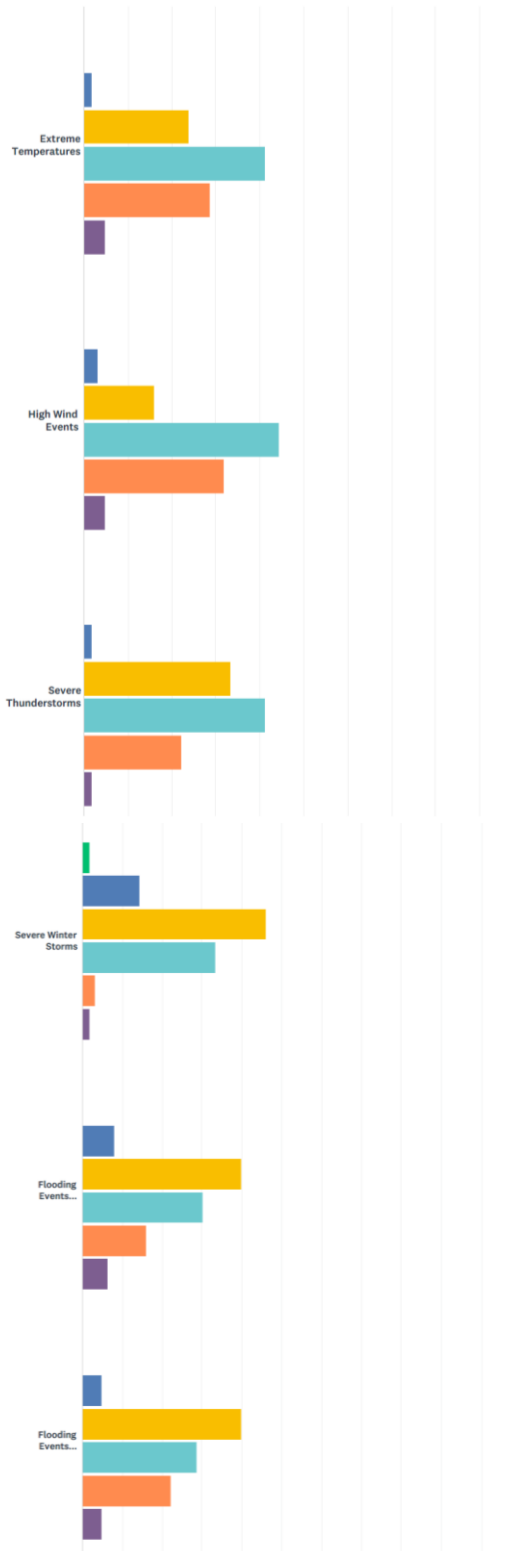




Appendix D: Meeting Documentation

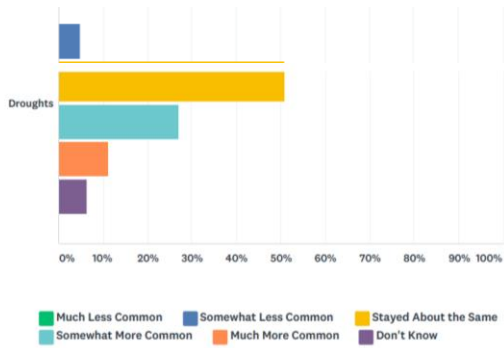
Q8 Have the following types of weather events become more or less common in your community over the past five (5) years, or have they stayed about the same?

Answered: 63 Skipped: 0



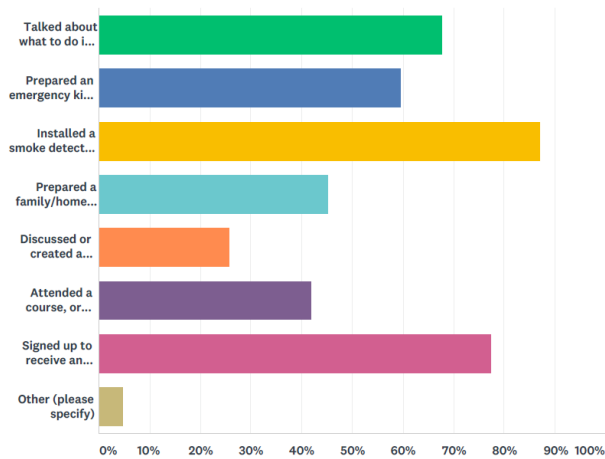


Appendix D: Meeting Documentation



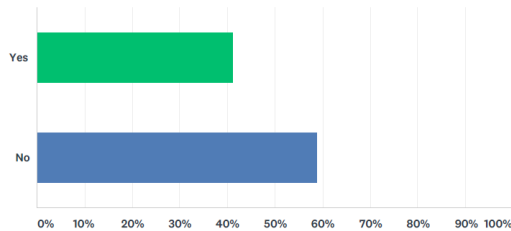
Q9 In your household, has anyone done any of the following natural disaster preparedness activities? (check all that apply)

Answered: 62 Skipped: 1



Q10 Have you ever received information on how to make your home or business better prepared for natural hazards?

Answered: 63 Skipped: 0

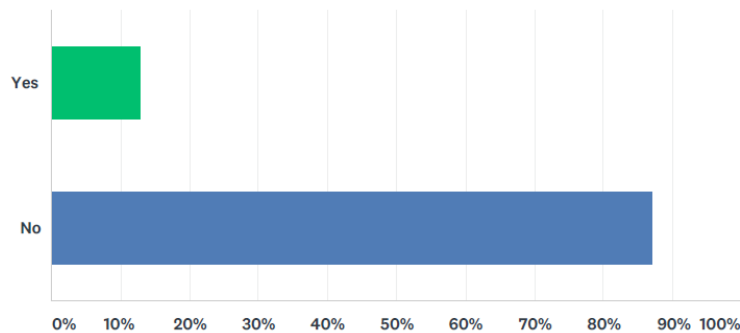




Appendix D: Meeting Documentation

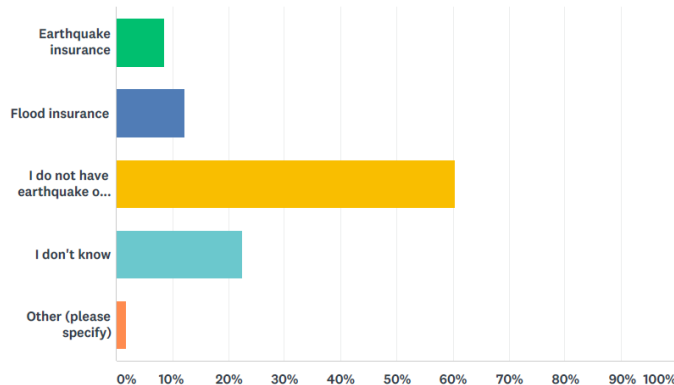
Q11 Does your street regularly flood or experience sustained puddling during rain events?

Answered: 62 Skipped: 1



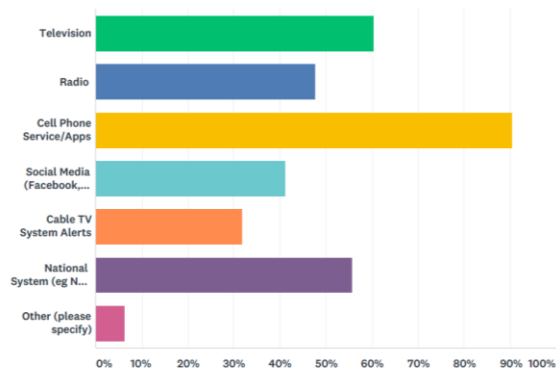
Q12 Is there any supplemental insurance on your property? (check all that apply)

Answered: 58 Skipped: 5



Q13 How do you receive information regarding severe weather events? (check all that apply)

Answered: 63 Skipped: 0





Appendix D: Meeting Documentation

Q14 Please use this space to provide any questions, comments, concerns regarding natural hazard, or other hazard, risks or preparedness.


Answered: 12 Skipped: 51



Appendix E: Public Involvement Documentation

Appendix E: Public Involvement Documentation


Social Media

**City of Lynchburg, Virginia Government**
December 2, 2019 · 🌐

Has a natural hazard impacted your home or business? The Central Virginia Planning District Commission (CVPDC) is working with the communities in our region to update the regional pre-disaster, or Hazard Mitigation Plan (HMP). The HMP helps communities assess risks to natural hazards and establish strategies to lessen impacts to residents, homes, and businesses.

YOUR INPUT NEEDED. Please participate in a six (6) minute survey to provide your feedback on natural hazard concern and impacts in our area. Take Survey CVPDC Pre-Disaster Public Survey - <https://www.surveymonkey.com/r/K3JTXPY>. This survey will be open until December 13th.

ATTEND A PUBLIC MEETING. The first of two public meetings for public input on the HMP will be held on December 4, 2019, 5:30 pm – 7:00 pm at the Miller Center, 301 Grove Street, Lynchburg. Details on future public meetings will be available on the CVPDC website.





Appendix E: Public Involvement Documentation



Central Virginia Planning District Commission

June 25 · 🌐



The Regional Hazard Mitigation Plan Public Webinar is tonight at 5:30.

Access the meeting on your computer here: <https://bit.ly/CentralVAHMP>
or join by phone at: 1-646-558-8656, ID# 86310619766.



THU, JUN 25

Regional Hazard Mitigation Plan Public Meeting Webinar

★ Interested ▾



Appendix E: Public Involvement Documentation

 **Central Virginia Planning District Commission**
June 17 · 🌐

Has your home, business, or community been impacted or damaged by a natural hazard?

Learn how area localities are developing a plan to establish strategies to lessen the overall impact and vulnerability from natural hazards to individuals, families, businesses, and property within our region. Participate in the Public Webinar, Thursday, June 25, 2020 to learn about the pre-disaster plan, hazard natural data and resource information for our area, review draft mitigation str... See More



REGIONAL HAZARD MITIGATION

PUBLIC WEBINAR

THURSDAY, JUNE 25 | 5:30PM

Join at: <https://bit.ly/CentralVAHMP>



Appendix E: Public Involvement Documentation





Appendix E: Public Involvement Documentation



Central Virginia Planning District Commission

December 4, 2019 · 🌐

...

Has a natural hazard impacted your home or business? The CVPDC is updating the regional pre-disaster, or Hazard Mitigation Plan (HMP). Join us this evening (12/4) at the Miller Center, 301 Grove Street, Lynchburg to learn about the HMP and provide input on your concerns about or impact from natural hazards in our region. Learn more at www.cvpdc.org.



Central Virginia Planning District Commission

December 2, 2019 · 🌐

...

The region is developing a pre-disaster, or Hazard Mitigation Plan (HMP), to establish strategies to lessen the overall vulnerability of natural hazards to individuals and property. Attend the HMP Public Meeting 5:30 - 7:00 pm, December 4th at the Miller Center, 301 Graves St, Lynchburg to learn and comment on this Plan.



1

3 Shares



Appendix E: Public Involvement Documentation



Central Virginia Planning District Commission

November 20, 2019 -

...

Has a natural hazard impacted your home or business? The CVPDC is updating the regional pre-disaster, or Hazard Mitigation Plan (HMP). The HMP helps communities assess risk to natural hazards and establish strategies to lessen impacts to residents & property. **YOUR INPUT IS NEEDED:** Please participate in a 6-minute survey to provide your feedback on hazard concern & impacts in our area. Access survey at: <https://www.surveymonkey.com/r/K3JTXPY>.





Appendix E: Public Involvement Documentation



Amherst County

November 26, 2019 · 🌐

...

REGIONAL PRE-DISASTER MITIGATION PLAN – COMMUNITY INPUT NEEDED

Has your home, business, or community been impacted or damaged by a natural hazard?

The Central Virginia Planning District Commission (CVPDC) is working with area communities to develop a pre-disaster plan, or Hazard Mitigation Plan, to establish strategies ahead of natural disasters to lessen the overall impact and vulnerability to individuals, families, businesses and property in our region.

Community Input Needed

Area residents, stakeholders, and business community are asked to provide feedback on your concerns and how you and your community prepare to be more resilient from natural disaster impacts.

How to Participate

1. Take a Survey. Please take six (6) minutes to provide your feedback on natural disasters in your community. Go to the CVPDC Pre-Disaster Public Survey to participate:

<https://www.surveymonkey.com/r/K3JTXPY>

2. Attend a Public Meeting. There will be at least two project public meetings.

What: CVPDC Hazard Mitigation Plan Public Meeting #1

When: Wednesday, December 4, 2019; 5:30 pm - 7:00 pm

Where: The Miller Center, 301 Grove Street, Lynchburg

3. Stay Informed.

Go to <https://www.cvpdc.org/regional-initiatives/hazard-mitigation.html> to learn more about the regional pre-disaster plan, Hazard Mitigation planning, VDEM and FEMA.



Amherst County

June 17 · 🌐

...

Has a natural hazard impacted your home or business? Join in a public meeting webinar June 25th @ 5:30 to learn about the regional pre-disaster, or Hazard Mitigation Plan (HMP).

Participants will learn about the HMP, proposed strategies to lessen hazard impacts to residents, property and businesses and how to comment on the Plan.

Join at: <https://us02web.zoom.us/j/86310619766>

or toll free, 1-646-558-8656, ID# 86310619766.



Appendix E: Public Involvement Documentation



Campbell County Department of Public Safety

...

June 9 · 🌐

Has a natural hazard impacted your home or business? Join in a public meeting webinar on June 25, 2020 at 5:30 p.m. to learn about the Regional Pre-Disaster, or Hazard Mitigation Plan (HMP).

Participants will learn about the HMP, proposed strategies to lessen hazard impacts to residents, property and businesses and how to comment on the Plan.

Join at <https://us02web.zoom.us/j/86310619766> or toll free, 1-646-558-8656, ID# 86310619766.



Appendix E: Public Involvement Documentation



Campbell County Department of Public Safety

November 19, 2019 · 🌐

...

Central Virginia Planning District Commission Requests Community Input for Pre-Disaster Planning

Has your home, business, or community been impacted or damaged by a natural hazard?

The Central Virginia Planning District Commission (CVPDC) is working with area communities to develop a pre-disaster plan, or Hazard Mitigation Plan, to establish strategies ahead of natural disasters to lessen the overall impact and vulnerability to individuals, families, businesses and property... See More



Town of Altavista, Virginia

Page · 1.7K like this · Government Organization

...

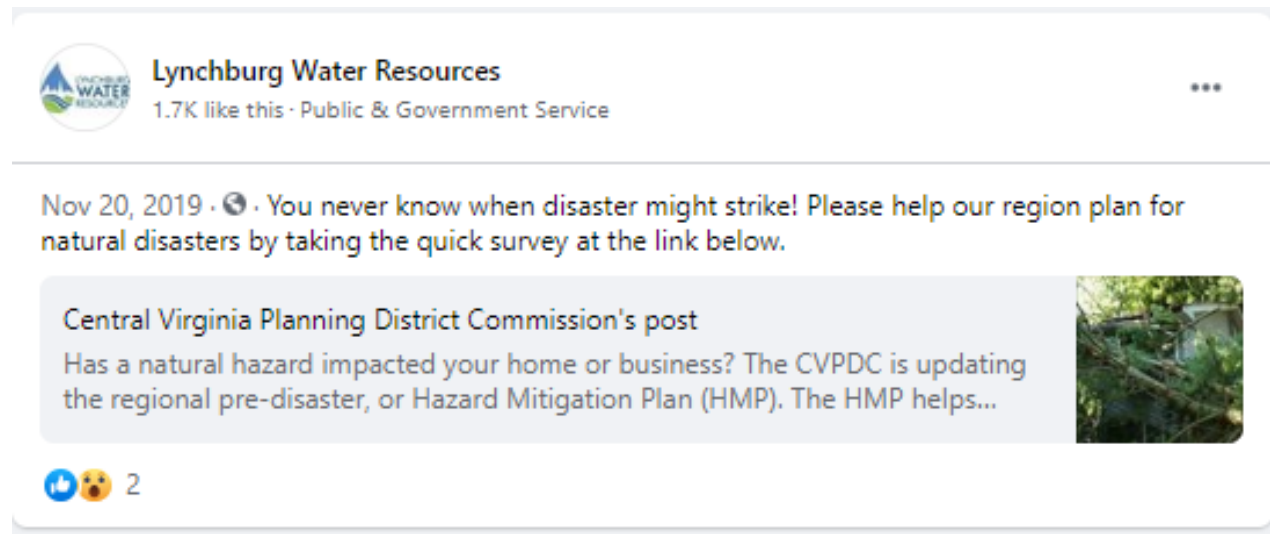
Jun 10 · 🌐 · Has a natural hazard impacted your home or business? Join in a public meeting webinar June 25th @ 5:30 to learn about the regional pre-disaster, or Hazard Mitigation Plan (HMP). Participants will learn about the HMP, proposed strategies to lessen hazard impacts to residents, property and businesses and ho...



👍 3



Appendix E: Public Involvement Documentation



Central Virginia Planning District Commission

NEWSLETTER

Regional Pre-Disaster Mitigation Plan Public Meeting: June 25

Participate in the public webinar to learn more about the regional plan and provide feedback.

Has your home, business, or community been impacted or damaged by a natural hazard? The CVPDC is developing a pre-disaster plan, or Hazard Mitigation Plan, to establish strategies to lessen the vulnerability and impact from natural hazards to individuals, families, businesses, and property in the region.

Community Input Opportunity: **Participate in the Public Webinar, Thursday, June 25th at 5:30 p.m.** to hear about the regional hazard data, plan resource information and area draft mitigation strategies. Participants also learn how to directly access the resource information and provide comment on the regional Hazard Mitigation Plan.

Meeting Information:

Join the Webinar [here](#), or participate via phone using the information below:

Toll Free: 1-846-558-8656

Meeting ID: 863 1061 9766



Appendix E: Public Involvement Documentation

Posted on: November 19, 2019

[ARCHIVED] REGIONAL PRE-DISASTER MITIGATION PLAN – COMMUNITY INPUT NEEDED

REGIONAL PRE-DISASTER MITIGATION PLAN – COMMUNITY INPUT NEEDED

Has your home, business, or community been impacted or damaged by a natural hazard?

The Central Virginia Planning District Commission (CVPDC) is working with area communities to develop a pre-disaster plan, or Hazard Mitigation Plan, to establish strategies ahead of natural disasters to lessen the overall impact and vulnerability to individuals, families, businesses and property in our region.



Community Input Needed

Area residents, stakeholders, and business community are asked to provide feedback on your concerns and how you and your community prepare to be more resilient from natural disaster impacts.

How to Participate

1. Take a Survey. Please take six (6) minutes to provide your feedback on natural disasters in your community. Go to [CVPDC Pre-Disaster Public Survey](#) to participate.
2. Attend a Public Meeting. There will be at least two project public meetings.

What: CVPDC Hazard Mitigation Plan Public Meeting #1

When: Wednesday, December 4, 2019; 5:30 pm – 7:00 pm

Where: The Miller Center, 301 Grove Street, Lynchburg

3. Stay Informed.

Go to <https://www.cvpdc.org/regional-initiatives/hazard-mitigation.html> to learn more about the regional pre-disaster plan, Hazard Mitigation planning, VDEM and FEMA.



Appendix E: Public Involvement Documentation

Local News Station


abc 13 NEWS

NEWS WEATHER CORONAVIRUS FEATURES CHIME IN WATCH

Residents input needed in developing region's pre-disaster or Hazard Mitigation Plan

by Ida Domingo | Monday, November 18th 2019


Remember: Daylight savings time ends at 2:00am November 3, 2019



14341 845-3431




HOME ABOUT CONSOLIDATED SERVICES REGIONAL INITIATIVES COMMUNITY DEVELOPMENT TRANSPORTATION RESOURCES

Hazard Mitigation



The Federal Emergency Management Agency (FEMA) requires localities develop and maintain a plan that examines the risk and impact of natural disasters and establishes strategies to mitigate or lessen human and property impacts. To ensure FEMA mitigation grant fund eligibility, the mitigation plan must be updated every five years.

A Hazard Mitigation Plan is developed for an area to assess natural hazards vulnerability and establish strategies to lessen the overall impact and vulnerability to individuals, families, businesses, and property within our region to natural disasters. (CVPDC)



LYNCHBURG, Va. (WSET) -- The Central Virginia Planning District Commission (CVPDC), through grant funding provided by the Virginia Department of Emergency Management (VDEM), and in partnership with area localities and community stakeholders is developing a pre-disaster plan or Hazard Mitigation Plan.



Appendix E: Public Involvement Documentation

Local Newspaper

https://newsadvance.com/news/local/public-input-wanted-on-central-virginias-hazards/article_6d728076-c822-5a6b-961b-176e321fba24.html

Public input wanted on Central Virginia's hazards

Public input wanted on Central Virginia's hazards

By Olivia Johnson Nov 30, 2019

Only \$5 for 5 months



An aerial view of tornado damage along Timberlake Road in Campbell County, pictured on Tuesday, April 17, 2018. News & Advance file photo/Jay Westcott



Local officials are seeking input from residents to develop a plan that could mitigate damage after disasters — such as the tornadoes and flooding that hit Lynchburg and the surrounding counties in 2018.

On Dec. 4, the Central Virginia Planning District Commission (CVPDC) will hold the first of two public meetings to present a draft update to its Hazard Mitigation Plan — also called a pre-disaster plan — and encourage citizens to give feedback and share concerns regarding how to prepare for natural disasters in their area.

The plan, which localities are required to revise every five years, covers Amherst, Appomattox, Bedford and Campbell counties, the city of Lynchburg, and the towns of Altavista, Amherst, Appomattox, Bedford and Brookneal.

First created in 2006, the plan aims to lessen the negative impact on individuals, businesses and properties when a natural disaster occurs, like flooding, high winds, tornadoes or extreme heat.

“These large natural hazard events are happening, and the cost ... is so



Professional Installation

LeafFilter installs on your existing gutters & ends the reoccurring of clogged gutters.

LeafFilter Gutter Guards

[Learn More](#)



Appendix F: Plan Comments

Appendix F: Plan Comments

Chapter	Comments
Dam	Double check to see if this is in the base floodplain.
	The point and footprint representing this facility are out of the base floodplain. However, the imagery shows the east corner of the lot is partially in floodplain.
	Are we missing Buffalo River Dam#1 - Mill Creek Reservoir
	Mill Creek Reservoir Dam (aka Buffalo River Dam #4A) is not a high hazard dam in DSIS inventory.
	The New Camp Hydaway Dam, Inventory No. 031035 is not constructed yet. (will be high hazard & has been added to this document) The existing Camp Hydaway Dam, Inventory No. 031013 is currently present upstream of the proposed new and enlarged lake. The existing dam/lake will be decommissioned as part of the overall construction plan of new and enlarged dam/lake.) (This is an unknown hazard dam, once decommissioned the total number of unknown hazard dams will be 21.
Flooding	Provide updated insurance info
	These numbers need to be reviewed.
	Although we removed outbuildings for the economic analysis, can we show how many are exposed to the flood hazard. How many sheds are in the floodplain?
	This is confusing. Is this 178 in the 0.2%?
	Same comment for all communities.
	Is this 4 in each or 4 total?
	Need to update with final number.
	Is this 8 in each of the flood zones or 8 total?
	Need to add the nuclear facility at Mt. Athos. It is still in use by both Framatome and BWXT.
	This is not the only definition of RL or what is used for the list. Recommend adding the full definition related to insurance.
	Replace: "Lynchburg College" with "University of Lynchburg"
	Maybe include the % difference to give the reader an idea of how significant the increase is? I think it could be really useful to add a new table that shows the difference for all the communities between the 2 scenarios. Most people don't understand their flood risk, and it's especially difficult to grasp how this can change when talking about floods by 1%/.2% or 100yr/500yr. These values are going to be a great way to show those impacts, but I wouldn't assume that readers will go back and forth between the tables to figure it out on their own.
	Add: "The Altavista Water Plant and the Intake Pump Station are in the floodplain. (The Plant is in Pittsy..."
	Delete: "Local NFIP coordinators should be contacted for more detailed information." Removed this because they're not allowed to share this information with the public beyond what is in this plan, and I think this makes it sound like they can get additional details if they ask.



Appendix F: Plan Comments

Chapter	Comments
Droughts	Does the Amherst County number include the Town of Amherst? If so, the number looks low to me.
Earthquakes	<p>This is a very good point, but I think it important to remember that the magnitudes that we have for older EQs are in ML or Mb rather than Mw. For instrumentally measured magnitudes, we indicated the magnitude type in the DMME earthquake database (you can see this in Table 2 below). I think it is important to recognize both...but that might be getting into the weeds too much for a hazard plan.</p> <p>We now use the Moment Magnitude Scale not the Richter Scale. Moment magnitude is a better indicator of the amount of energy released. https://www.usgs.gov/faqs/moment-magnitude-richter-scale-what-are-different-magnitude-scales-and-why-are-there-so-many?qt-news_science_products=0#qt-news_science_products</p> <p>In the vulnerability section, we should also list the older, unreinforced masonry critical facilities that would be highly susceptible to earthquake.</p> <p>We need to look at these numbers. Hazus shouldn't require a magnitude to run the AEL - it runs all the probabilities and annualizes them. Is this a 2500-year event maybe? Also, the Mineral event should probably be moved to the edge of the seismic zone and not put into the middle of Lynchburg.</p>
Extreme Temperatures - Heat	
fog	<p>We could ask the jurisdictions which roads have frequent accidents due to fog and highlight those.</p> <p>Add: "Folks locally know that this area, especially L'burg City, Bedford & Amherst experience fog fairly f..."</p>
Hailstorm	Do we have damage by jurisdiction? I'm thinking we can do an average annualized loss table here. We could do this for all the hazards where we have data on damage amounts. This will help us better compare hazards.
Hazardous Material Incidents	Also worse if had taken place on a warm, sunny day. There were not people on the trail and sitting on Depot grille deck.
Hurricane	<p>Would be good to identify vulnerable critical facilities here - based on building characteristics and generator information. Same as other wind events - could refer to tornado section.</p> <p>Also, need to discuss what makes a structure more susceptible to hurricane damage - similar to tornado.</p>
Land subsidence and Karst	
Landslide	We have received 1-meter LIDAR for this area and there are indeed landslides associated with Hurricane Camille in northern Amherst County. That may be too much new data for this round of edits. May want to save for the next iteration of the hazard plan.



Appendix F: Plan Comments

Chapter	Comments
	This was so minor, I'm surprised that USGS picked up on it. It was literally just a little burp off of the road embankment. Not really even large enough to add to my landslide database. You can see a picture here: https://wset.com/news/local/mudslide-on-route-501-in-bedford
	where did magnitude 6 come from? Magnitude 6 on east coast is different from west coast. Is there a reference?
	It was from the feedback of Anne Witt (DMME): "EQ not large enough here must be M+6.0"
	Yes, we have never had an earthquake in Virginia larger than a M 6.0. This would not be a major factor in LS generation in Virginia. Maybe reword sentence to remove the reference to earthquakes all together and add hurricanes?
Severe thunderstorm	This should be moved to the mitigation section. GI can be used for several of the hazards.
Severe Winter Storm	
Solar Events	
Terrorism	
Tornado Wind	There is an option in the full version of Word to landscape selected text (also pages, this is under the Page Setup options. It will make the document more presentable as an electronic document and still print the way intended.
	Thank Erin for the tip. We will make the final formatting in Word with appropriate page orientations. (Google Doc doesn't support mixed page orientation in one document)
urban fire	(For Amherst, Central VA Training Center is scheduled to close mid-2020; all residents have been relocated off campus, there are only 12 staff working there, almost all of the buildings are empty and not being used, and many of them are derelict. I don't know if all this would impact its listing as a critical facility.) (For Amherst, would the ACSA water plant and major sewage pump station be critical facilities?) (For Amherst, there are many more schools and churches than are listed. The same with fire stations, police stations, and other facilities that are listed under other CVPDC areas) these just critical facilities within urban area rather than entire jurisdiction
Wildfire	This might be better in the mitigation section.
	I don't see red areas in Bedford County. Is there a way to better show those areas?
	Only one pixel is categorized as "very high". Maybe I could merge the "high" and "very high" categories together.
Mitigation	It is easier to reference specific items if they are in a number or letter sequence. I selected letters so they wouldn't conflict with the other numbering.
	communities and governments; referred-to simply as the "region"
	clarify that the objective is information nor education
	Identify public shelters and locations.



Appendix F: Plan Comments

Chapter	Comments
	This objective fits here much better than were it was. Succeeding sections need renumbering.
	define flood plains
	Note: in I Obj 3 and 4 you identify two specific hazards and provide detail on information and education on fire and floods. What about the other hazards: earthquakes, hurricanes, ice storms, draughts, heat waves, etc. Aren't there comparable detailed materials available? Information? Best practices? Education? Etc. Couldn't you develop a generic list of activities you propose under a generic Objective?
	You can not prevent natural hazards and even for hazmat spills they are difficult for communities to prevent. You can only prepare for them
	Made all the goal statements parallel in structure and internally consistent.
	Preplanning and site visits of what?
	Long and convoluted strategy - needs clarification and rewording
	These individual strategies seem to apply to different stakeholders, is that intended?
	Only two strategies for high winds which would include tornadoes and hurricanes? What about zoning changes? design best practices? etc
	These are three significantly different systems and really deserve three different strategies.
	What are "fire zone practices"?



Appendix G: Critical Facilities

Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Amherst	Airport	TIMBERDOODLE AIRPORT	EBENEZER RD	AMHERST	24521	37.5361, -79.0230
Amherst	Airport	FULCHER FAMILY FARMS AIRPORT	519 LITTLE PINEY RD	ROSELAND	22967	37.7251, -79.0831
Amherst	Airport	BUFFALO RIDGE AIRPORT	237 AIRSPORTS DR	AMHERST	24521	37.6053, -79.0164
Amherst	Attractions	MONACAN ANCESTRAL MUSEUM	2003 KENMORE RD	AMHERST	24521	37.3863, -78.8131
Amherst	Attractions	AMHERST COUNTY MUSEUM AND HISTORICAL SOCIETY	154 S MAIN ST	AMHERST	24521	37.3604, -78.8689
Amherst	Campground	OTTER CREEK CAMPGROUND	60809 BLUE RIDGE PKWY	MONROE	24574	37.2631, -78.8494
Amherst	Campground	LYNCHBURG/BLUE RIDGE PARKWAY KOA	6252 ELON RD	MONROE	24574	37.3271, -79.4048
Amherst	Campground	SHADY MOUNTAIN CAMPGROUND	1405 PANTHER FALLS RD	VESUVIUS	24521	37.3485, -79.5720
Amherst	Campground	ORONOCO CAMPGROUND	316 NATURE CAMP TRAIL	VESUVIUS	24483	37.2331, -79.5854
Amherst	College	SWEET BRIAR COLLEGE	151 QUAD	AMHERST	24595	37.2887, -79.4469
Amherst	College	CENTRAL VIRGINIA COMMUNITY COLLEGE - AMHERST CENTER	200 RICHMOND HWY	AMHERST	24521	37.1417, -79.0164
Amherst	Communication Facility	WAMV - AM - COMMUNITY FIRST BROADCASTERS, INC.	531 HIGGINBOTHAM CREEK RD	AMHERST	24521	37.4143, -78.9642
Amherst	Communication Facility	WAMV - AM - COMMUNITY FIRST BROADCASTERS, INC.	104 BUCK HILL DR	AMHERST	24521	37.2717, -79.3359
Amherst	Communication Facility	WBRG - AM - TRI-COUNTY BROADCASTING, INC.	239 RAGLAND RD	MADISON HEIGHTS	24572	37.3779, -79.1222
Amherst	Communication Facility	WVGM - AM - 3 DAUGHTERS MEDIA, INC.	181 MAIN ST	MADISON HEIGHTS	24572	37.3254, -79.2012
Amherst	Communication Facility	WKPA - AM - SEVEN HILLS MEDIA, INC.	185 INTEGRITY LN	MADISON HEIGHTS	24572	37.1077, -79.5925
Amherst	Communication Facility	WYYD - FS - CAPSTAR TX, LLC	1850 MISTOVER DR	MONROE	24574	37.1188, -79.6028
Amherst	Communication Facility	WZZU - FM - CENTENNIAL LICENSING, LLC	1915 MISTOVER DR	MONROE	24574	37.1126, -79.6092



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Amherst	Communication Facility	W283AZ - FX - BRENT EPPERSON	239 RAGLAND RD	MADISON HEIGHTS	24572	37.2654, -79.0428
Amherst	Communication Facility	WVBE-FM - FM - MEL WHEELER, INC	1608 MONACAN PKWY	MADISON HEIGHTS	24572	37.4137, -79.1443
Amherst	Communication Facility	WWZW - FM - FIRST MEDIA RADIO, LLC	46840 BLUE RIDGE PKWY	BUENA VISTA	24416	37.4206, -79.1439
Amherst	Communication Facility	WRMV-LP - FL - FELLOWSHIP COMMUNITY CHURCH AND CHRISTIAN SCHOOLS	110 CHURCH ST	MADISON HEIGHTS	24572	37.4142, -79.1543
Amherst	Communication Facility	WSNZ - FM - ALOHA STATION TRUST, LLC	181 MAIN ST	MADISON HEIGHTS	24572	37.4038, -79.1520
Amherst	Communication Facility	WJJX - FM - CAPSTAR TX, LLC	273 ROUND TOP TRL	MADISON HEIGHTS	24572	37.4393, -79.1699
Amherst	Communication Facility	WJJX - FS - CAPSTAR TX, LLC	1850 MISTOVER DR	MONROE	24574	37.4149, -79.1565
Amherst	Communication Facility	WLNI - FM - CENTENNIAL LICENSING, LLC	181 MAIN ST	MADISON HEIGHTS	24572	37.3803, -79.1963
Amherst	Communication Facility	WNRS-FM - FM - STU-COMM, INC	1915 MISTOVER DR	MONROE	24574	37.4162, -79.1403
Amherst	Communication Facility	W204AZ - FX - CALVARY CHAPEL OF LYNCHBURG	273 ROUND TOP TRL	MADISON HEIGHTS	24572	37.3305, -79.5360
Amherst	Electrical Substation	ELECTRICAL SUBSTATION	311 PLUNKETT ST	AMHERST	24521	37.1300, -79.2697
Amherst	Electrical Substation	ELECTRICAL SUBSTATION	688 ORANGE ST	MADISON HEIGHTS	24572	37.3713, -78.8244
Amherst	Electrical Substation	ELECTRICAL SUBSTATION	720 BLUE RIDGE AVE	MADISON HEIGHTS	24572	37.5729, -79.1270
Amherst	Electrical Substation	ELECTRICAL SUBSTATION	1551 DAWN DR	MADISON HEIGHTS	24572	37.5867, -79.0520
Amherst	Electrical Substation	ELECTRICAL SUBSTATION	2188 MCGHEE ST	AMHERST	24521	37.0699, -79.5819
Amherst	Electrical Substation	ELECTRICAL SUBSTATION	8908 BIG ISLAND HWY	AMHERST	24521	37.4428, -79.6045
Amherst	Electrical Substation	ELECTRICAL SUBSTATION	1026 CHURCHILL RD	MONROE	24574	37.0834, -79.5951
Amherst	Electrical Substation	ELECTRICAL SUBSTATION	2746 MT ATHOS RD	MONROE	24574	37.0622, -79.5601
Amherst	Electrical Substation	ELECTRICAL SUBSTATION	22239 TIMBERLAKE RD	MONROE	24574	37.2232, -79.7753
Amherst	Electrical Substation	ELECTRICAL SUBSTATION	3770 CANDLERS MOUNTAIN RD	LYNCHBURG	24503	37.1397, -79.6464



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Amherst	Emergency Operations Center	AMHERST COUNTY EMERGENCY OPERATIONS CENTER	874 BLUE RIDGE AVE	AMHERST	24521	37.1548, -79.6994
Amherst	Energy Facility	CUSHAW HYDRO POWER PLANT	139 LANCER LN	MONROE	24526	37.0595, -79.4468
Amherst	Energy Facility	SNOWDEN HYDRO POWER PLANT	219 TROJAN LN	BIG ISLAND	24526	37.0998, -79.6246
Amherst	Fire Stations	GREIF BROTHERS PACKAGING CORPORATION - RIVERVILLE MILL FIRE BRIGADE AND EMERGENCY MEDICAL SERVICES	578 LAWYERS RD	GLADSTONE	24553	37.2234, -79.6669
Amherst	Fire Stations	AMHERST VOLUNTEER FIRE DEPARTMENT	1271 VOLUNTEER RD	AMHERST	24521	37.1569, -79.4332
Amherst	Fire Stations	PEDLAR VOLUNTEER FIRE AND RESCUE	1901 TATE SPRINGS RD	AMHERST	24521	37.4704, -79.1918
Amherst	Fire Stations	MONELISON VOLUNTEER FIRE DEPARTMENT	3180 FORT AVE	MADISON HEIGHTS	24572	37.2370, -79.4137
Amherst	Gas Facility	GAS FACILITY	3621 CANDLERS MOUNTAIN RD	AMHERST	24521	37.3073, -79.6844
Amherst	HazMat Facility	GREIF PACKAGING CONTAINERBOARD MILL	1324 MITCHELL BELL RD	GLADSTONE	24521	37.1944, -79.5664
Amherst	HazMat Facility	OLD VIRGINIA BRICK CO	4201 MURRAY PL	MADISON HEIGHTS	24572	37.2147, -79.4621
Amherst	HazMat Facility	LYNCHBURG STEEL & SPECIALTY CO INC	FOUNDER'S LN	MONROE	24574-2758	37.1583, -79.6617
Amherst	HazMat Facility	THOMAS ROAD LANDFILL (AMSTED IND-GRIFFIN PIPE PRODUCTS CO)	16538 SMITH MOUNTAIN LAKE PKWY	MADISON HEIGHTS	24572	37.1417, -79.5865
Amherst	Law Enforcement	AMHERST COUNTY SHERIFFS OFFICE	1604 GRAVES MILL RD	AMHERST	24521	37.4505, -79.6346
Amherst	Law Enforcement	AMHERST POLICE DEPARTMENT	931 ASHLAND AVE	AMHERST	24521	37.0605, -79.4484
Amherst	Law Enforcement	CENTRAL VIRGINIA TRAINING CENTER POLICE DEPARTMENT	1203 ROUNDTREE DR	MADISON HEIGHTS	24572	37.5760, -79.3379
Amherst	Public Health	AMELON IMMEDIATE CARE	200 CLARION RD	MADISON HEIGHTS	24572	37.5744, -79.3247
Amherst	Schools	SOLID ROCK BAPTIST CHURCH	521 COLONY RD	MADISON HEIGHTS	24572	37.7170, -79.2893
Amherst	Schools	TEMPLE CHRISTIAN SCHOOL	1073 FATHER JUDGE RD	MADISON HEIGHTS	24572	37.7488, -79.2653
Amherst	Schools	AMELON ELEMENTARY	1916 REDFIELDS RD	MADISON HEIGHTS	24572	37.3372, -78.9372
Amherst	Schools	AMHERST COUNTY HIGH	198 EVERGREEN AVE	AMHERST	24521	37.3945, -78.6395



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Amherst	Schools	AMHERST EDUCATIONAL CENTER	176 KIDS PL	MADISON HEIGHTS	24572	37.2108, -79.0496
Amherst	Schools	AMHERST ELEMENTARY	2020 CHURCH ST	AMHERST	24521	37.1116, -78.9304
Amherst	Schools	AMHERST MIDDLE	185 LEARNING LN	AMHERST	24521	37.3644, -79.1797
Amherst	Schools	CENTRAL ELEMENTARY	1032 BIBLE LN	AMHERST	24521	37.3951, -79.1515
Amherst	Schools	ELON ELEMENTARY	1071 WOODBERRY SQUARE PL	MADISON HEIGHTS	24572	37.3977, -79.1842
Amherst	Schools	MADISON HEIGHTS ELEMENTARY	729 BLUE RIDGE AVE	MADISON HEIGHTS	24572	37.3757, -79.2263
Amherst	Schools	MONELISON MIDDLE	100 ASHWOOD DR	MADISON HEIGHTS	24572	37.4374, -79.1708
Amherst	Schools	PLEASANT VIEW ELEMENTARY	1374 RIVERMONT ACADEMY RD	MONROE	24574	37.3589, -79.1844
Amherst	Schools	TEMPERANCE ELEMENTARY	1027 HUDDLESTON DR	AMHERST	24521	37.3503, -79.1797
Amherst	Schools	CENTRAL VIRGINIA TRAINING CENTER	1 CAVALIER CIRCLE	MADISON HEIGHTS	24572	37.4169, -79.1714
Amherst	Schools	OLD DOMINION JOB CORPS CENTER	100 LIBERTY MINUTEMEN DR	MONROE	24521	37.5563, -79.0797
Amherst	Service Authority	AMHERST COUNTY SERVICE AUTHORITY WATER OFFICE	1200 LANE ACCESS RD	MADISON HEIGHTS	24572	37.5840, -79.0483
Amherst	Sewer Pump Station	PUMP STATION	4690 PEAKS RD	AMHERST	24521	37.3524, -79.2286
Amherst	Sewer Pump Station	SEWER PUMP STATION	1134 FANCY FARM RD	AMHERST	24521	37.3446, -79.4987
Amherst	Special Population Facility - Nursing Home	FAIRMONT CROSSING REHABILITATION AND HEALTH CARE CENTER	215 EVERGREEN AVE	AMHERST	24521	37.3611, -78.8292
Amherst	Special Population Facility - Nursing Home	JOHNSON SENIOR CENTER INC.	4400 HYDRO ST	AMHERST	24521	37.5397, -79.0528
Amherst	Special Populations Facility - Detention Facility	AMHERST COUNTY ADULT DETENTION CENTER	165 GORDONS FAIRGROUND RD	MADISON HEIGHTS	24572	37.5397, -79.0917
Amherst	Special Populations Facility - Detention Facility	AMHERST COUNTY JAIL / SHERIFF	147 YOUNGER DR	AMHERST	24521	37.3475, -79.5234
Amherst	Wastewater Treatment Plant	RUTLEDGE CREEK WWTP	1000 FRANKLIN AVE	AMHERST	24521	37.4208, -79.1152
Amherst	Wastewater Treatment Plant	LANUM WATER FILTRATION PLANT	1355 ELON RD	MADISON HEIGHTS	24572	37.0384, -78.9420
Amherst	Wastewater Treatment Plant	AMHERST WATER TREATMENT PLANT	208 GRANDVIEW DR	AMHERST	24521	37.3717, -78.8350



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Amherst	Water Storage Facility	WATER TANK	2438 PAMPLIN RD	AMHERST	24521	37.1647, -79.6343
Amherst	Water Storage Facility	UNION HILL WATER TANK	1424 MARVIN DR	AMHERST	24521	37.4272, -79.1235
Amherst	Water Storage Facility	UNKNOWN WATER FACILITY	210 CASCADE DR	MADISON HEIGHTS	24572	37.1225, -79.2890
Amherst	Water Storage Facility	WATER TANK	574 HIGH POINT RD	MADISON HEIGHTS	24572	37.4644, -79.1233
Amherst	Water Storage Facility	WATER TANK	1662 CAPEWOOD DR	MADISON HEIGHTS	24572	37.4070, -79.2322
Amherst	Water Storage Facility	WATER TANK	1132 MOUNTAIN WATER DR	MADISON HEIGHTS	24572	37.4275, -79.2231
Amherst	Water Storage Facility	WATER TANK	1375 W LONDON PARK DR	AMHERST	24521	37.4703, -79.3762
Appomattox	Airport	NASHS AIRPORT	162 AIRPORT DR	APPOMATTOX	24522	37.5609, -79.1915
Appomattox	Airport	STATE POLICE DIVISION THREE HELIPORT	132 POLICE TOWER RD	APPOMATTOX	24522	37.3207, -79.6329
Appomattox	Airport	HIGHVIEW FARMS AIRPORT	2212 PROMISE LAND RD	APPOMATTOX	24522	37.5632, -79.1936
Appomattox	Airport	SKOVHUS AIRPORT	469 VINEYARD RD	CONCORD	24538	37.4208, -79.1152
Appomattox	Attractions	AMERICAN CIVIL WAR MUSEUM - APPOMATTOX	159 HORSESHOE RD	APPOMATTOX	24522	37.2856, -79.0901
Appomattox	Campground	PARADISE LAKE FAMILY CAMPGROUND	1265 WEST LAKE RD	SPOUT SPRING	24593	37.4501, -79.0748
Appomattox	Campground	HOLLIDAY LAKE STATE PARK CAMPGROUND	2763 STATE PARK RD	APPOMATTOX	24522	37.2855, -79.0899
Appomattox	College	CENTRAL VIRGINIA COMMUNITY COLLEGE - APPOMATTOX CENTER	132 CARVER LN	APPOMATTOX	24522	37.3490, -79.1679
Appomattox	Communication Facility	WOWZ - AM - PERCEPTION MEDIA, INC.	330 COUNTRY VIEW LN	APPOMATTOX	24522	37.7270, -79.3065
Appomattox	Communication Facility	WTTX-FM - FM - POSITIVE ALTERNATIVE RADIO, INC	330 COUNTRY VIEW LN	APPOMATTOX	24522	37.4704, -79.3762
Appomattox	Electrical Substation	ELECTRICAL SUBSTATION	585 GEORGE ST	APPOMATTOX	24522	37.4201, -79.1317
Appomattox	Electrical Substation	ELECTRICAL SUBSTATION	306 CANDLERS MOUNTAIN RD	APPOMATTOX	24522	37.1973, -79.3517
Appomattox	Electrical Substation	ELECTRICAL SUBSTATION	935 WATERLICK RD	GLADSTONE	24553	37.1973, -79.3517
Appomattox	Emergency Operations Center	APPOMATTOX COUNTY EMERGENCY OPERATIONS CENTER	240 THIRD DIVISION LOOP	APPOMATTOX	24522	37.3858, -79.6686



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Appomattox	Fire Stations	APPOMATTOX VOLUNTEER FIRE DEPARTMENT	10770 LEE JACKSON HWY	APPOMATTOX	24522	37.4272, -79.1235
Appomattox	Fire Stations	PAMPLIN VOLUNTEER FIRE DEPARTMENT AND EMERGENCY MEDICAL SERVICES	2401 ATHERHOLT RD	PAMPLIN	23958	37.3717, -78.8350
Appomattox	Gas Facility	WILLIAMS / TRANSCO GAS PIPELINE STATION	600 MAIN ST	APPOMATTOX	24522	37.4704, -79.3762
Appomattox	HazMat Facility	THOMASVILLE FURNITURE IND INC-VIRGINIA OPERATIONS (CLOSED)	3 ABRASIVE AVE	APPOMATTOX	24522	37.4690, -79.0073
Appomattox	HazMat Facility	TIGER FUEL COMPANY	130 COMMERCE ST	APPOMATTOX	24522	37.5609, -79.1915
Appomattox	Law Enforcement	APPOMATTOX COUNTY SHERIFFS OFFICE / APPOMATTOX COUNTY JAIL	2200 LANDOVER PL	APPOMATTOX	24522	37.3591, -79.1587
Appomattox	Law Enforcement	VIRGINIA STATE POLICE DIVISION 3 AREA 21 - HEADQUARTERS	5615 SEMINOLE AVE	APPOMATTOX	24522	37.1608, -79.2241
Appomattox	Schools	APPOMATTOX CHRISTIAN ACADEMY	600 EDMUND ST	APPOMATTOX	24522	37.3490, -79.1679
Appomattox	Schools	APPOMATTOX COUNTY HIGH	12718 MONETA RD	APPOMATTOX	24522	37.4272, -79.1235
Appomattox	Schools	APPOMATTOX ELEMENTARY	1 LITTLE PATRIOT DR	APPOMATTOX	24522	37.5641, -79.1926
Appomattox	Schools	APPOMATTOX MIDDLE	12400 EAST LYNCHBURG-SALEM TPKE	APPOMATTOX	24522	37.4689, -79.0069
Appomattox	Schools	APPOMATTOX PRIMARY	1044 OTTER RIVER DR	APPOMATTOX	24522	37.3591, -79.1588
Appomattox	Sewer Pump Station	SEWER PUMP STATION	1309 TOWNGATE RD	APPOMATTOX	24522	37.3190, -79.2759
Appomattox	Sewer Pump Station	PUMP STATION	11325 E LYNCHBURG SALEM TPKE	APPOMATTOX	24522	37.3490, -79.1679
Appomattox	Sewer Pump Station	PUMP STATION	1601 NICHOLS RD	APPOMATTOX	24522	37.3490, -79.1679
Appomattox	Sewer Pump Station	PUMP STATION	1455 BELMONT DR	APPOMATTOX	24522	37.1975, -79.3519
Appomattox	Special Population Facility - Nursing Home	BABCOCK MANOR INC.	1806 TAYLOR FORD RD	APPOMATTOX	24522	37.3493, -79.1684
Appomattox	Special Population Facility - Nursing Home	APPOMATTOX HEALTH & REHABILITATION CENTER	7933 ELON RD	APPOMATTOX	24522	37.3592, -79.1587
Appomattox	Special Populations Facility - Detention Facility	APPOMATTOX COUNTY JAIL	257 TROJAN RD	APPOMATTOX	24522	37.3416, -78.9880
Appomattox	Wastewater Treatment Plant	APPOMATTOX WATER RECLAMATION FACILITY	180 MOSELEY LN	APPOMATTOX	24522	37.4703, -79.3761
Appomattox	Wastewater Treatment Plant	APPOMATTOX TRICKLING FILTER PLANT	1287 PURDUM MILL RD	APPOMATTOX	24522	37.2855, -79.0900
Appomattox	Water Booster Pump Station	WATER PUMP STATION	902 HELM ST	APPOMATTOX	24522	37.2866, -79.0900



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Appomattox	Water Storage Facility	WATER TOWER	106 RIDGEVIEW DR	PAMPLIN	23958	37.2866, -79.0900
Appomattox	Water Storage Facility	WATER TANK	5 BLACKWATER RD	SPOUT SPRING	24593	37.3151, -79.6348
Bedford	Airport	MILLER AIRPORT	2390 BELLS MILL RD	GOODE	24556	37.3592, -79.1587
Bedford	Airport	ROBINSON AIRPORT	1588 PATTERSON MILL RD	BEDFORD	24523	37.3207, -79.6326
Bedford	Airport	JOHNSON FOX FIELD AIRPORT	1376 HARVEYS CREEK RD	MONETA	24121	37.6947, -79.0120
Bedford	Airport	HAWK RIDGE AIRPORT	1228 TUMBLEWEED LN	BEDFORD	24523	37.4062, -79.0772
Bedford	Airport	NEW LONDON AIRPORT	1261 WHEELS DR	FOREST	24551	37.4266, -79.0846
Bedford	Airport	SMITH MOUNTAIN LAKE AIRPORT	1759 BUCCANEER RD	MONETA	24121	37.4564, -79.1243
Bedford	Airport	LAKEVIEW AERODROME AIRPORT	2026 SKYWAY DR	MONETA	24121	37.5614, -79.0125
Bedford	Airport	RED BIRDS AIRYARD AIRPORT	1184 DIANE DR	MONETA	24121	37.5937, -79.0322
Bedford	Attractions	NATIONAL D-DAY MEMORIAL	3 OVERLORD CIR	BEDFORD	24523	37.5103, -79.2283
Bedford	Campground	EAGLES ROOST CAMPGROUND	15267 SMITH MOUNTAIN LAKE PKWY	HUDDLESTON	24104	37.4900, -79.1237
Bedford	Campground	PEAKS OF OTTER CAMPGROUND	10454 PEAKS RD	BEDFORD	24523	37.5637, -79.1928
Bedford	Campground	SMITH MOUNTAIN LAKE STATE PARK	1619 OVERNIGHT RD	HUDDLESTON	24104	37.4303, -78.9263
Bedford	Campground	MITCHELL'S POINT MARINA & CAMPGROUND	3508 TRADING POST RD	HUDDLESTON	24104	37.3452, -78.8140
Bedford	Campground	MOORMAN MARINA	1510 MOORMAN RD	GOODVIEW	24101	37.5070, -78.7826
Bedford	Campground	WATERFRONT PARK CAMPGROUND	1184 WATERFRONT DR	MONETA	24121	37.3746, -79.5021
Bedford	Campground	HANNABASS-CROUCH CAMPGROUND	1241 HANNABASS DR	GOODVIEW	24095	37.3356, -79.5225
Bedford	Campground	TRI-COUNTY MARINA	1261 SUNRISE LOOP	LYNCH STATION	24571	37.3334, -79.5123
Bedford	Campground	ISLE OF PINES SUBDIVISION CAMPGROUND	ACROSS FROM 3930 ISLE OF PINES DR	MONETA	24121	37.3393, -79.5414
Bedford	Campground	SPRING VALLEY FARM CAMPGROUND	2077 MEADORS SPUR RD	MONETA	24121	37.3401, -79.5042
Bedford	Campground	CAMP LOWMAN	11738 LEESVILLE RD	LYNCH STATION	24571	37.3460, -79.4897
Bedford	Campground	CAMP SACAJAWEA--GIRL SCOUTS	2124 FOX HILL RD	LYNCHBURG	24503	37.4599, -79.4651



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Bedford	Campground	LEGACY INTERNATIONAL--GLOBAL YOUTH VILLAGE	1020 LEGACY DR	BEDFORD	24523	37.5411, -79.3978
Bedford	Campground	THE WOODS ADVENTURE & CONFERENCE RETREAT (LEASED)	1336 SIMMONS MILL RD	THAXTON	24174	37.4259, -79.0374
Bedford	Campground	CAMP KARMA	2058 STONE MOUNTAIN RD	BEDFORD	24523	37.3230, -79.2586
Bedford	Campground	CHURCH OF GOD IN VIRGINIA--BEDFORD CAMP	1149 CIDER MILL RD	BEDFORD	24523	37.3273, -79.1830
Bedford	Campground	HALESFORD HARBOUR RV PARK RESORT	1336 CAMPERS PARADISE TRL	MONETA	24121	37.3266, -79.1555
Bedford	Campground	SWEETWATER RV PARK	4474 WHITE HOUSE RD	MONETA	24121	37.3073, -79.2162
Bedford	Campground	THOMAS ROAD OUTPOST	7794 SHEEP CREEK RD	BEDFORD	24523	37.3307, -78.9933
Bedford	Campground	TUCK-A-WAY CAMPGROUND	1312 SUNRISE LOOP	LYNCH STATION	24571	37.2772, -79.1062
Bedford	College	CENTRAL VIRGINIA COMMUNITY COLLEGE - BEDFORD CENTER	1635 VENTURE BLVD	BEDFORD	24523	37.3726, -79.1076
Bedford	Communication Facility	WBLT - AM - 3 DAUGHTERS MEDIA, INC.	1225 WINDSOR DR	BEDFORD	24523	37.4043, -79.0595
Bedford	Communication Facility	WSLK - AM - SMILE BROADCASTING, LLC	1084 HENDRICKS STORE RD	MONETA	24121	37.3754, -79.1681
Bedford	Communication Facility	WYYD - FM - CAPSTAR TX, LLC	3523 NO BUSINESS MOUNTAIN RD	BIG ISLAND	24526	37.3873, -79.1555
Bedford	Communication Facility	WZZI - FM - CENTENNIAL LICENSING, LLC	2966 FLAT TOP RD	BEDFORD	24523	37.3894, -79.1222
Bedford	Communication Facility	WXCF-FM - FM - WVJT, LLC	3523 NO BUSINESS MOUNTAIN RD	BIG ISLAND	24526	37.4062, -79.1339
Bedford	Communication Facility	WRXT - FM - POSITIVE ALTERNATIVE RADIO, INC	1686 HILLANDALE RD	THAXTON	24174	37.4194, -79.1447
Bedford	Communication Facility	WIQO-FM - FM - WVJT, LLC	3523 NO BUSINESS MOUNTAIN RD	BIG ISLAND	24526	37.4329, -79.2292
Bedford	Communication Facility	W40BM - TX - TRINITY BROADCASTING NETWORK	3523 NO BUSINESS MOUNTAIN RD	BIG ISLAND	24526	37.4345, -79.1653
Bedford	Communication Facility	WSET-TV - DT - WSET INCORPORATED	2968 FLAT TOP RD	BEDFORD	24523	37.4622, -79.1872
Bedford	Communication Facility	WWCW - DT - GB LYNCHBURG LICENSING LLC	2966 FLAT TOP RD	BEDFORD	24523	37.4620, -79.1889
Bedford	Electrical Substation	ELECTRICAL SUBSTATION	8445 VILLAGE HWY	BEDFORD	24523	37.3617, -79.1798
Bedford	Electrical Substation	ELECTRICAL SUBSTATION	247 DRUMMER ST	BEDFORD	24523	37.3736, -79.2045



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Bedford	Electrical Substation	ELECTRICAL SUBSTATION	92 TUMBLEWOOD TRL	BEDFORD	24523	37.4093, -79.1644
Bedford	Electrical Substation	ELECTRICAL SUBSTATION	1124 MT ATHOS RD	BEDFORD	24523	37.4445, -79.1962
Bedford	Electrical Substation	ELECTRICAL SUBSTATION	4215 MURRAY PL	BEDFORD	24523	37.3638, -79.1720
Bedford	Electrical Substation	ELECTRICAL SUBSTATION	2651 CLOVER PL	BEDFORD	24523	37.3116, -79.5052
Bedford	Electrical Substation	ELECTRICAL SUBSTATION	500 PEAKS VIEW DR	BEDFORD	24523	37.2781, -79.1024
Bedford	Electrical Substation	ELECTRICAL SUBSTATION	1901 ELM ST	BIG ISLAND	24526	37.5854, -79.0497
Bedford	Emergency Operations Center	BEDFORD COUNTY EMERGENCY OPERATIONS CENTER / BEDFORD CITY EMERGENCY OPERATIONS CENTER	186 SOUTH MAIN ST	BEDFORD	24523	37.3559, -78.8296
Bedford	Energy Facility	BEDFORD SOLAR	115 TAYLOR ST	BEDFORD	24523	37.3351, -79.4810
Bedford	Energy Facility	GEORGIA-PACIFIC BIG ISLAND PLANT	179 MORTON LN	BIG ISLAND	24526	37.1188, -79.2735
Bedford	Energy Facility	COLEMAN FALLS DAM HYDRO PLANT	90 COURTHOUSE LN	COLEMAN FALLS	24536	37.5351, -79.3573
Bedford	Energy Facility	HOLCOMB ROCK DAM HYDRO PLANT	510 9TH ST	HOLCOMB ROCK	24503	37.5021, -79.3006
Bedford	Energy Facility	SMITH MOUNTAIN DAM HYDRO PLANT	132 AMER COURT	SANDY LEVEL	24141	37.5036, -79.2628
Bedford	Fire Stations	BEDFORD COUNTY DEPARTMENT OF FIRE AND RESCUE COMPANY 7 - HUDDLESTON FIRE DEPARTMENT STATION 3	12253 SMITH MOUNTAIN LAKE PKWY	HUDDLESTON	24104	37.0931, -79.4022
Bedford	Fire Stations	MONETA VOLUNTEER FIRE DEPARTMENT STATION 3	5377 SMITH MOUNTAIN LAKE PKWY	MONETA	24095	37.4630, -79.1867
Bedford	Fire Stations	SAUNDERS VOLUNTEER FIRE DEPARTMENT STATION 2	1645 THOMAS JEFFERSON RD	HUDDLESTON	24104	37.0413, -79.5356
Bedford	Fire Stations	HUDDLESTON VOLUNTEER FIRE DEPARTMENT	719 CONFEDERATE BLVD	HUDDLESTON	24104	37.5929, -79.3813
Bedford	Fire Stations	BEDFORD COUNTY DEPARTMENT OF FIRE AND RESCUE COMPANY 8 - MONETA FIRE COMPANY STATION 2	3477 SMITH MOUNTAIN LAKE PKWY	BEDFORD	24523	37.5736, -79.3715
Bedford	Fire Stations	BEDFORD COUNTY DEPARTMENT OF FIRE AND RESCUE - HEADQUARTERS	315 BEDFORD AVE	BEDFORD	24523	37.2336, -79.1911
Bedford	Fire Stations	HARDY VOLUNTEER FIRE DEPARTMENT	801 CLAY ST	HARDY	24101	37.4343, -79.1647
Bedford	Fire Stations	BEDFORD COUNTY DEPARTMENT OF FIRE AND RESCUE COMPANY 19 -	697 VILLAGE HWY	VINTON	24179	37.3970, -79.2284



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
		STEWARTSVILLE-CHAMBLISSBURG FIRE COMPANY STATION 2				
Bedford	Fire Stations	CHAMBLISSBURG FIRST AID AND RESCUE SQUAD INCORPORATED	12573 RICHMOND HWY	GOODVIEW	24179	37.3559, -79.2275
Bedford	Fire Stations	SAUNDERS VOLUNTEER FIRE DEPARTMENT	3640 WATERLICK RD	HUDDLESTON	24104	37.4461, -79.2148
Bedford	Fire Stations	HUDDLESTON VOLUNTEER FIRE DEPARTMENT INCORPORATED	103 WICKLIFFE AVE	HUDDLESTON	24104	37.4025, -79.1400
Bedford	Fire Stations	FOREST VOLUNTEER FIRE DEPARTMENT	1280 MAIN ST	FOREST	24551	37.3821, -79.1813
Bedford	Fire Stations	BEDFORD COUNTY DEPARTMENT OF FIRE AND RESCUE COMPANY 7 - HUDDLESTON FIRE DEPARTMENT STATION 2	7797 JORDANTOWN RD	HUDDLESTON	24104	37.4026, -79.1590
Bedford	Fire Stations	BEDFORD COUNTY DEPARTMENT OF FIRE AND RESCUE COMPANY 3 - BOONSBORO FIRE AND RESCUE COMPANY	12737 NORTH OLD MONETA RD	LYNCHBURG	24503	37.2748, -79.0994
Bedford	Fire Stations	BEDFORD FIRE DEPARTMENT	2394 PAMPLIN RD	BEDFORD	24523	37.3289, -79.2016
Bedford	Fire Stations	BIG ISLAND VOLUNTEER FIRE DEPARTMENT INCORPORATED	1835 GRAVES MILL RD	BIG ISLAND	24526	37.0851, -79.5288
Bedford	Fire Stations	STEWARTSVILLE-CHAMBLISSBURG VOLUNTEER FIRE COMPANY	1613 OAKWOOD ST	VINTON	24179	37.1954, -79.6854
Bedford	Fire Stations	MONTVALE VOLUNTEER FIRE DEPARTMENT	3300 RIVERMONT AVE	MONTVALE	24122	37.0540, -79.5830
Bedford	Fire Stations	MONETA VOLUNTEER FIRE DEPARTMENT STATION 1	3300 RIVERMONT AVE	MONETA	24121	37.2134, -79.4118
Bedford	Fire Stations	SHADY GROVE VOLUNTEER FIRE DEPARTMENT	2001 UNIVERSITY BLVD	THAXTON	24174	37.2265, -79.5554
Bedford	HazMat Facility	TRIDENT SEAFOODS BEDFORD PLANT	940 ORANGE ST	BEDFORD	24523-3303	37.1600, -79.0717
Bedford	HazMat Facility	SAM MOORE FURNITURE LLC	1556 DAWN DR	BEDFORD	24523	37.4006, -79.0568
Bedford	HazMat Facility	SAFETY-KLEEN SYSTEMS	16090 STEWARTSVILLE RD	VINTON	24179-5490	37.3092, -79.5023
Bedford	HazMat Facility	BLUE RIDGE WOOD PRESERVING INCORPORATED	1220 HENDRICKS STORE RD	MONETA	24121	37.2361, -79.8109
Bedford	HazMat Facility	GRAN TEE INVESTMENTS	GARNET ST AND CONCORD TPKE	BEDFORD	24523-2168	37.3782, -79.1683
Bedford	HazMat Facility	GEORGIA PACIFIC CORP - BIG ISLAND MILL	1619 WYTHE RD	BIG ISLAND	24526	37.2576, -79.7224
Bedford	HazMat Facility	RUBATEX CORP PLANT 2	861 FIBRE PLANT RD	BEDFORD	24523	37.5120, -78.9083



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Bedford	HazMat Facility	NYDREE FLOORING LLC (CLOSED)	24 PRICE AVE	FOREST	24551-0289	37.2535, -79.7111
Bedford	HazMat Facility	TRANSMONTAIGNE - MONTVALE PIEDMONT TERMINAL	2801 FORT AVE	MONTVALE	24122	37.1085, -79.5773
Bedford	HazMat Facility	BARR LABORATORIES INC	12660 E LYNCHBURG SALEM TPKE	FOREST	24551	37.1584, -79.4801
Bedford	HazMat Facility	WINOA USA (W ABRASIVES)	351 ELMWOOD LN	BEDFORD	24523-1802	37.3563, -79.2837
Bedford	HazMat Facility	CUSTOM TRUCK ONE SOURCE	2624 LAKESIDE DR	FOREST	24551	37.3496, -78.8151
Bedford	HazMat Facility	BUCKEYE TERMINALS, LLC - ROANOKE TERMINAL	213 OLD GRAVES MILL RD	MONTVALE	24122	37.1689, -79.4540
Bedford	HazMat Facility	COMMSCOPE TECHNOLOGIES LLC	163 KABLER LN	FOREST	24551	37.5847, -79.0505
Bedford	HazMat Facility	WHEELABRATOR LANDFILL (WINOA USA, INC.)	3346 HORSESHOE BEND RD	BEDFORD	24523	37.4507, -79.2614
Bedford	Law Enforcement	BEDFORD POLICE DEPARTMENT	1317 LOLA AVE	BEDFORD	24523	37.3365, -79.5242
Bedford	Law Enforcement	BEDFORD COUNTY SHERIFFS OFFICE - HEADQUARTERS	30 MONICA BLVD	BEDFORD	24523	37.4137, -79.1459
Bedford	Law Enforcement	VIRGINIA STATE POLICE DIVISION 6 AREA 41 - BEDFORD	2406 ATHERHOLT RD	BEDFORD	24523	37.2328, -79.2920
Bedford	Public Health	SURGERY CENTER OF CENTRAL VIRGINIA	339 COURT ST	FOREST	24551	37.2753, -79.1021
Bedford	Public Health	BEDFORD MEMORIAL HOSPITAL	215 MAIN ST	BEDFORD	24523	37.3127, -79.1953
Bedford	Public Health	BEDFORD FAMILY URGENT CARE	1204 BEDFORD AVE	BEDFORD	24523	37.3504, -78.9803
Bedford	Schools	MINERAL SPRINGS CHRISTIAN SCHOOL	806 BURKS HILL RD	VINTON	24179	37.3309, -79.2529
Bedford	Schools	BLUE RIDGE MONTESSORI SCHOOL	503 LONGWOOD AVE	LYNCHBURG	24502	37.0481, -78.9403
Bedford	Schools	PRECEPT SCHOOLS OF VIRGINIA	807 COLLEGE ST	BEDFORD	24523	37.1199, -79.2755
Bedford	Schools	FOREST MIDDLE	1114 SCHOOLDAYS RD	FOREST	24551	37.5346, -79.3606
Bedford	Schools	GOODVIEW ELEMENTARY	1234 EAGLE CIRCLE	GOODVIEW	24095	37.2716, -79.7933
Bedford	Schools	HUDDLESTON ELEMENTARY	3420 BODY CAMP RD	HUDDLESTON	24104	37.3850, -79.7305
Bedford	Schools	JEFFERSON FOREST HIGH	1 SCHOLAR LN	FOREST	24551	37.1868, -79.6134
Bedford	Schools	LIBERTY HIGH	1095 GOLDEN EAGLE DR	BEDFORD	24523	37.2698, -78.6844
Bedford	Schools	BEDFORD SCIENCE AND TECHNOLOGY CENTER	1293 GOLDEN EAGLE DR	BEDFORD	24523	37.6725, -79.2171



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Bedford	Schools	MONETA ELEMENTARY	1138 WILDCAT RD	MONETA	24121	37.4698, -79.1188
Bedford	Schools	MONTVALE ELEMENTARY	1245 THAXTON SCHOOL RD	MONTVALE	24122	37.3197, -79.7185
Bedford	Schools	NEW LONDON ACADEMY ELEMENTARY	1255 PATRIOT PL	FOREST	24551	37.3452, -78.8740
Bedford	Schools	OTTER RIVER ELEMENTARY	5946 BROOKNEAL HWY	GOODE	24556	37.4951, -79.0568
Bedford	Schools	BEDFORD ELEMENTARY	202 HORIZON DR	BEDFORD	24523	37.2811, -78.9325
Bedford	Schools	BEDFORD MIDDLE	2812 GREENVIEW DR	BEDFORD	24523	37.1457, -79.0481
Bedford	Schools	BEDFORD PRIMARY	2183 SUNNYMEADE RD	BEDFORD	24523	37.3879, -79.0990
Bedford	Schools	BIG ISLAND ELEMENTARY	19 GEORGE ST	BIG ISLAND	24526	37.4032, -79.1277
Bedford	Schools	BOONSBORO ELEMENTARY	1003 LYNCH MILL RD	LYNCHBURG	24503	37.3721, -79.1607
Bedford	Schools	BODY CAMP ELEMENTARY	904 BEDFORD AVE	BEDFORD	24523	37.3369, -79.4993
Bedford	Schools	FOREST ELEMENTARY	133 CHARLOTTE ST	FOREST	24551	37.3388, -79.5035
Bedford	Schools	STAUNTON RIVER HIGH	100 LAXTON RD	MONETA	24121	37.1097, -79.2855
Bedford	Schools	STAUNTON RIVER MIDDLE	320 BEE DR	MONETA	24121	37.4208, -79.1413
Bedford	Schools	STEWARTSVILLE ELEMENTARY	194 DENNIS RIDDLE DR	GOODVIEW	24095	37.1333, -79.2658
Bedford	Schools	THAXTON ELEMENTARY	9339 VILLAGE HWY	THAXTON	24174	37.1225, -79.0313
Bedford	Schools	THOMAS JEFFERSON ELEMENTARY	194 DENNIS RIDDLE DR	FOREST	24551	37.3893, -79.1575
Bedford	Sewer Pump Station	MONETA WWTP/ INFLUENT PUMP STATION PS 3	219 MUSTANG RD	MONETA	24121	37.3811, -79.2192
Bedford	Sewer Pump Station	PUMP STATION #9	1725 WHITFIELD DR	BEDFORD	24523	37.1453, -79.2742
Bedford	Sewer Pump Station	PUMP STATION #1	4099 OLIVER ST	MONETA	24121	37.4024, -79.1521
Bedford	Sewer Pump Station	SEWER PUMP STATION #2	1577 VILLAGE CT	MONETA	24121	37.3760, -79.1601
Bedford	Sewer Pump Station	SEWER PUMP STATION #4	1720 WHITFIELD DR	MONETA	24121	37.2727, -79.8138
Bedford	Sewer Pump Station	LAKE VISTA PUMP STATION	1108 BEALE TRAIL RD	FOREST	24551	37.1622, -79.6325
Bedford	Sewer Pump Station	FOREST MIDDLE SCHOOL PUMP STATION	1097 WESTCOVE RD	FOREST	24551	37.1122, -79.2782
Bedford	Sewer Pump Station	FARMINGTON PUMP STATION	12970 SMITH MOUNTAIN LAKE PKWY	FOREST	24551	37.3269, -79.1939
Bedford	Sewer Pump Station	PUMP STATION #6	116 FAWN HAVEN LN	BEDFORD	24523	37.3639, -79.1721
Bedford	Sewer Pump Station	PUMP STATION #10	1014 ORANGE ST	BEDFORD	24523	37.4086, -79.0541



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Bedford	Sewer Pump Station	NEW LONDON PUMP STATION	1032 PARKHALL RD	FOREST	24551	37.1253, -79.2856
Bedford	Sewer Pump Station	PUMP STATION #1	109 FAWN HAVEN LN	BEDFORD	24523	37.4061, -79.1583
Bedford	Sewer Pump Station	PUMP STATION #4	1015 DOULTON CIR	BEDFORD	24523	37.3350, -79.5093
Bedford	Sewer Pump Station	PUMP STATION #7	1175 MARINERS WAY	BEDFORD	24523	37.3889, -79.1678
Bedford	Sewer Pump Station	PUMP STATION #2	2326 LAKE RETREAT RD	BEDFORD	24523	37.3719, -79.1631
Bedford	Sewer Pump Station	PUMP STATION #5	1178 HOOPER RD	BEDFORD	24523	37.5328, -79.3556
Bedford	Sewer Pump Station	PUMP STATION #12	7 TIMBEROAK CT	BEDFORD	24523	37.4071, -79.1318
Bedford	Sewer Pump Station	PUMP STATION #8	20105 LEESVILLE RD	BEDFORD	24523	37.3356, -79.5178
Bedford	Sewer Pump Station	MONTVALE PUMP STATION	208 DRUMMER ST	MONTVALE	24122	37.1187, -79.2734
Bedford	Sewer Pump Station	PUMP STATION	24 ALPINE DR	HUDDLESTON	24104	37.3661, -79.2467
Bedford	Sewer Pump Station	LIFT STATION	51 FNB DR	HUDDLESTON	24104	37.3913, -79.1621
Bedford	Sewer Pump Station	PUMP STATION	176 CAMPBELL HWY	HUDDLESTON	24104	37.3693, -79.1646
Bedford	Sewer Pump Station	PUMP STATION #3	31 WEBBS WAY DR	BEDFORD	24523	37.5107, -78.9101
Bedford	Sewer Pump Station	LIFT STATION	180 MOSELEY LN	HUDDLESTON	24104	37.3527, -79.1890
Bedford	Sewer Pump Station	LIFT STATION	576 LAWYERS RD	HUDDLESTON	24104	37.3664, -79.3023
Bedford	Sewer Pump Station	LIFT STATION	13238 WARDS RD	LYNCHBURG	24503	37.3675, -79.1730
Bedford	Sewer Pump Station	LIFT STATION	2781 LIBERTY MOUNTAIN DR	HUDDLESTON	24104	37.4027, -79.0595
Bedford	Sewer Pump Station	LIFT STATION	56 BRUSH TAVERN DR	HUDDLESTON	24104	37.3881, -79.7316
Bedford	Sewer Pump Station	LIFT STATION	50 ROWSE DR	FOREST	24551	37.4628, -79.1475
Bedford	Special Population Facility - Nursing Home	ENGLISH MEADOWS ELKS HOME CAMPUS	2081 LANGHORNE RD	BEDFORD	24523	37.5075, -79.1230
Bedford	Special Population Facility - Nursing Home	BEDFORD COUNTY NURSING HOME	633 COOK AVE	BEDFORD	24523	37.3755, -79.2423
Bedford	Special Population Facility - Nursing Home	CARRIAGE HILL	13055 WEST LYNCHBURG/SALEM TPKE	BEDFORD	24523	37.0687, -78.9728
Bedford	Special Population Facility - Nursing Home	RUNK & PRATT OF FOREST INC.	1300 ENTERPRISE DR	FOREST	24551	37.3809, -79.3143
Bedford	Special Population Facility - Nursing Home	WOODHAVEN NURSING HOME	7443 ELON RD	MONTVALE	24122	37.3758, -79.1649



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Bedford	Special Population Facility - Nursing Home	CAMPBELL REST HOME	1400 FLORIDA AVE	BEDFORD	24523	37.3735, -79.1713
Bedford	Special Populations Facility - Detention Facility	BEDFORD ADULT DETENTION CENTER	287 LEARNING LN	BEDFORD	24523	37.3977, -79.1655
Bedford	Wastewater Treatment Plant	MONTVALE WASTEWATER TREATMENT	9405 VILLAGE HWY	MONTVALE	24122	37.3783, -79.1694
Bedford	Wastewater Treatment Plant	BEDFORD WASTEWATER TREATMENT PLANT	20 RICKY VAN SHELTON DR	BEDFORD	24523	37.3627, -78.8375
Bedford	Wastewater Treatment Plant	MONETA REGIONAL WWTP	1622 WHITE HOUSE RD	MONETA	24121	37.0543, -78.9513
Bedford	Wastewater Treatment Plant	SMITH MOUNTAIN LAKE WATER TREATMENT FACILITY	1500 RADFORD CHURCH RD	MONETA	24121	37.3441, -79.5536
Bedford	Wastewater Treatment Plant	NEW FILTER PLANT TRS 1-4	1132 MOUNTAIN WATER DR	BEDFORD	24523	37.3065, -79.3008
Bedford	Water Booster Pump Station	WATER PUMP STATION - 5 (TOWN OF BEDFORD WATER)	1650 WATERLICK RD	BEDFORD	24523	37.3842, -79.7342
Bedford	Water Booster Pump Station	WATER PUMP STATION - 1 (WOODS LANDING PUMP STATION)	113 PHELPS RD	LYNCHBURG	24503	37.1314, -79.2916
Bedford	Water Booster Pump Station	WATER PUMP STATION - 2 (CAPEWOOD DR. WELL NO. 5 BUILDING)	185 LITTLE PATRIOT DR	HUDDLESTON	24104	37.3699, -79.1615
Bedford	Water Booster Pump Station	WATER PUMP STATION - 3 (DEERWOOD WELL HOUSE)	216 ETHEL ST	HUDDLESTON	24104	37.3739, -79.1746
Bedford	Water Booster Pump Station	WATER PUMP STATION - 4 (FOX RUNN WATER PUMP STATION)	146 CLARK ST	LYNCHBURG	24503	37.3734, -79.2536
Bedford	Water Storage Facility	MILL LANE GROUND TANK, 5,000,000 GALLON	733 SPOUT SPRING RD	LYNCHBURG	24505	37.3981, -79.1412
Bedford	Water Storage Facility	HUNTINGWOOD TANK, 2,000,000 GALLON	4690 PEAKS RD	LYNCHBURG	24505	37.4111, -79.0506
Bedford	Water Storage Facility	MARVIN DRIVE WATER TANK	6861 COTTONTOWN RD	VINTON	24179	37.3462, -79.5526
Bedford	Water Storage Facility	WATER TANK	852 ORANGE ST	MONETA	24121	37.4411, -79.1398
Bedford	Water Storage Facility	WELL LOT RIDGEVIEW SC 1	123 RADIO RD	LYNCHBURG	24503	37.3522, -78.8268
Bedford	Water Storage Facility	IVY CR TANK	1622 WHITE HOUSE RD	FOREST	24551	37.2211, -78.9516
Bedford	Water Storage Facility	CASCADE FOREST LT 14 B-2 WATER TANK	180 MOSELEY LN	VINTON	24179	37.4057, -79.0501
Bedford	Water Storage Facility	BP #665-05 TANK 100% COMP FOR 2006	1287 PURDUM MILL RD	MONETA	24121	37.3106, -79.2837
Bedford	Water Storage Facility	MTN VIEW SHORES LT60A WELL LOT	2301 CONCORD TPKE	HUDDLESTON	24104	37.2088, -79.3079
Bedford	Water Storage Facility	TANK	1355 ELON RD	BEDFORD	24523	37.1397, -78.8988



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Bedford	Water Storage Facility	WATER TANK LOT PB 43/196	1500 RADFORD CHURCH RD	FOREST	24551	37.3133, -79.0395
Bedford	Water Storage Facility	RESERVOIR HILL	9625 LEESVILLE RD	BEDFORD	24523	37.1644, -79.0155
Campbell	Airport	BROOKNEAL/CAMPBELL COUNTY AIRPORT	133 RUNWAY RD	GLADYS	24554	37.2181, -79.2915
Campbell	Airport	LYNCHBURG RGNL/PRESTON GLENN FLD AIRPORT	702 HANGAR RD	LYNCHBURG	24502	37.0436, -78.9599
Campbell	Airport	BREEZY KNOLL AIRPORT	2501 BEAR CREEK RD	RUSTBURG	24588	37.1986, -79.2365
Campbell	Attractions	AVOCA MUSEUM	1514 MAIN ST	ALTAVISTA	24517	37.2333, -79.2527
Campbell	Campground	LYNCHBURG RV RESORT	439 MOLLIES CREEK RD	GLADYS	24554	37.0621, -79.0722
Campbell	Campground	HAT CREEK CAMP	7165 HAT CREEK RD	BROOKNEAL	24528	37.3111, -79.2691
Campbell	Communication Facility	WODI - AM - THE RAIN BROADCASTING, INC.	123 RADIO RD	BROOKNEAL	24528	37.2770, -79.1013
Campbell	Communication Facility	WKDE - AM - D.J. BROADCASTING, INC.,	1203 AVONDALE DR	ALTAVISTA	24517	37.1462, -79.3675
Campbell	Communication Facility	W293BY - FX - PAUL H. PASSINK	1336 TOWER HILL RD	RUSTBURG	24588	37.1826, -79.0394
Campbell	Communication Facility	WWEM - FM - EDUCATIONAL MEDIA CORP	1336 TOWER HILL RD	RUSTBURG	24588	37.0322, -78.8980
Campbell	Communication Facility	WWMC - FM - LIBERTY UNIVERSITY, INC	2570 CANDLERS MOUNTAIN RD	LYNCHBURG	24502	37.3932, -79.0612
Campbell	Communication Facility	WRVL - FM - LIBERTY UNIVERSITY, INC	1850 UPHILL TRL	EVINGTON	24550	37.1246, -79.2399
Campbell	Communication Facility	WRVL - FS - LIBERTY UNIVERSITY, INC	1850 UPHILL TRL	EVINGTON	24550	37.1733, -79.0476
Campbell	Communication Facility	W246CF - FX - POSITIVE ALTERNATIVE RADIO, INC	1510 MONOGRAM RD	LYNCHBURG	24502	37.0909, -79.0739
Campbell	Communication Facility	WKDE-FM - FM - D.J. BROADCASTING, INC	125 FERNBROOKE DR	ALTAVISTA	24517	37.1175, -79.2256
Campbell	Communication Facility	WKHF - FM - UNITED STATES CP, LLC	2570 CANDLERS MOUNTAIN RD	LYNCHBURG	24502	37.3924, -79.1664
Campbell	Communication Facility	W208AP - FX - VIRGINIA TECH FOUNDATION, INC	1510 MONOGRAM RD	LYNCHBURG	24502	37.3489, -79.1811
Campbell	Communication Facility	W227BG - FX - ONECOM, INC	1667 TIMBERLAKE DR	LYNCHBURG	24502	37.4174, -79.1441
Campbell	Communication Facility	W231CE - FX - CALVARY CHAPEL OF TWIN FALLS, INC	2570 CANDLERS MOUNTAIN RD	LYNCHBURG	24502	37.1140, -79.2889
Campbell	Communication Facility	W237CL - FX - CALVARY CHAPEL OF LYNCHBURG	2570 CANDLERS MOUNTAIN RD	LYNCHBURG	24502	37.0474, -78.9424
Campbell	Communication Facility	WTLU-CA - CA - LIBERTY UNIVERSITY, INC.	1850 UPHILL TRL	EVINGTON	24550	37.1103, -79.2899



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Campbell	Communication Facility	WTLU-CA - TX - LIBERTY UNIVERSITY, INC.	2550 CANDLERS MOUNTAIN RD	LYNCHBURG	24502	37.2775, -79.1024
Campbell	Communication Facility	WTLU-LD - LD - LIBERTY UNIVERSITY, INC.	1510 MONOGRAM RD	LYNCHBURG	24502	37.3304, -79.1938
Campbell	Communication Facility	W33AD - TX - GETHSEMANE BAPTIST CHURCH	599 DOSS RD	CONCORD	24538	37.3306, -79.2030
Campbell	Communication Facility	W60BM - TX - COMMONWEALTH PUBLIC BROADCASTING CORPORATION	1336 TOWER HILL RD	RUSTBURG	24588	37.3342, -79.5213
Campbell	Communication Facility	WDRG-LP - TX - PAUL H. PASSINK	1333 TOWER HILL RD	RUSTBURG	24588	37.3115, -79.5054
Campbell	Communication Facility	W04CI - TX - GETHSEMANE BAPTIST CHURCH	1333 TOWER HILL RD	RUSTBURG	24588	37.5853, -79.0498
Campbell	Communication Facility	WTLU-CD - DC - LIBERTY UNIVERSITY, INC	1510 MONOGRAM RD	LYNCHBURG	24502	37.3555, -78.8307
Campbell	Electrical Substation	AEP JOSHUA FALLS SUBSTATION	120 BLACKWATER ST	LYNCHBURG	24504	37.5856, -79.0521
Campbell	Electrical Substation	ELECTRICAL SUBSTATION	182 IRVINGTON SPRINGS RD	LYNCHBURG	24502	37.4156, -79.1427
Campbell	Electrical Substation	ELECTRICAL SUBSTATION	425 BIRCH ST	LYNCHBURG	24502	37.3377, -79.5496
Campbell	Electrical Substation	ELECTRICAL SUBSTATION	4370 HYDRO ST	RUSTBURG	24588	37.3618, -78.8688
Campbell	Electrical Substation	ELECTRICAL SUBSTATION	200 OLD TRENTS FERRY RD	LYNCHBURG	24501	37.3581, -79.1757
Campbell	Electrical Substation	ELECTRICAL SUBSTATION	2660 GLASS AVE	CONCORD	24538	37.4125, -79.1447
Campbell	Electrical Substation	ELECTRICAL SUBSTATION	6224 OLD MILL RD	RUSTBURG	24588	37.4134, -79.1442
Campbell	Electrical Substation	ELECTRICAL SUBSTATION	304 MORGAN ST	LYNCHBURG	24501	37.4156, -79.1195
Campbell	Electrical Substation	ELECTRICAL SUBSTATION	130 LINDEN AVE	LYNCHBURG	24504	37.3589, -79.1845
Campbell	Emergency Operations Center	CAMPBELL COUNTY EMERGENCY OPERATIONS CENTER	800 MAIN ST	RUSTBURG	24588	37.3773, -79.2442
Campbell	Energy Facility	ALTAVISTA POWER STATION	1000 BRD ST	ALTAVISTA	24517	37.3513, -79.5172
Campbell	Energy Facility	LEESVILLE HYDRO PLANT	131 OLD COLONY RD	LYNCH STATION	24563	37.4383, -79.1875
Campbell	Fire Stations	EVINGTON VOLUNTEER FIRE DEPARTMENT - SUBSTATION	14276 WYATTS WAY	RUSTBURG	24588	37.4377, -79.1883
Campbell	Fire Stations	VIRGINIA DEPARTMENT OF FORESTRY - CAMPBELL COUNTY	861 FIBRE PLANT RD	RUSTBURG	24588	37.4087, -79.1776
Campbell	Fire Stations	LYNCHBURG REGIONAL AIRPORT AIRCRAFT RESCUE FIRE FIGHTING	9960 STEWARTSVILLE RD	LYNCHBURG	24502	37.4171, -79.1711
Campbell	Fire Stations	GLADYS VOLUNTEER FIRE DEPARTMENT	135 2ND ST	GLADYS	24554	37.4681, -79.1166



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Campbell	Fire Stations	BWX TECHNOLOGIES NUCLEAR OPERATIONS DIVISION EMERGENCY TEAM	1065 LEE JACKSON HWY	LYNCHBURG	24504	37.3263, -79.5022
Campbell	Fire Stations	EVINGTON VOLUNTEER FIRE DEPARTMENT STATION 1 - HEADQUARTERS	133 AMER COURT	EVINGTON	24550	37.4115, -79.1493
Campbell	Fire Stations	RUSTBURG VOLUNTEER FIRE DEPARTMENT	101 SHADY GROVE DR	RUSTBURG	24588	37.4047, -79.1628
Campbell	Fire Stations	LYN-DAN HEIGHTS VOLUNTEER FIRE DEPARTMENT	2444 PUMPING STATION RD	LYNCHBURG	24501	37.4200, -79.1220
Campbell	Fire Stations	CONCORD VOLUNTEER FIRE DEPARTMENT	891 PARTRIDGE CREEK RD	CONCORD	24538	37.4521, -79.1168
Campbell	Fire Stations	BROOKVILLE-TIMBERLAKE VOLUNTEER FIRE DEPARTMENT	7989 NEW CHAPEL RD	FOREST	24551	37.4700, -79.1175
Campbell	Fire Stations	BROOKNEAL VOLUNTEER FIRE DEPARTMENT	10218 BROOKNEAL HWY	BROOKNEAL	24528	37.5700, -79.0585
Campbell	Fire Stations	ALTAVISTA FIRE COMPANY	230 MEGGINSON LN	ALTAVISTA	24517	37.4564, -79.1137
Campbell	Gas Facility	GAS FACILITY - COLUMBIA GAS OF VIRGINIA	1345 FALLING CREEK RD	SPOUT SPRING	24593	37.5875, -79.0453
Campbell	Gas Facility	GAS FACILITY	34 COMMUNICATIONS LN	GLADYS	24554	37.5696, -79.0318
Campbell	HazMat Facility	LANE HOME FURNISHINGS	701 5TH ST	ALTAVISTA	24517	37.5693, -79.0361
Campbell	HazMat Facility	ABBOTT LABORATORIES - ROSS PRODUCTS DIVISION	1518 MAIN ST	ALTAVISTA	24517	37.5136, -79.1956
Campbell	HazMat Facility	GEORGIA-PACIFIC BROOKNEAL OSB	11795 BROOKNEAL HWY	GLADYS	24554	37.4320, -79.1337
Campbell	HazMat Facility	TIMKEN CO ALTAVISTA BEARING PLANT	2097 DEARING FORD RD.	ALTAVISTA	24517	37.4546, -79.1132
Campbell	HazMat Facility	BGF INDUSTRIES	3600 CANDLERS MOUNTAIN RD	ALTAVISTA	24517-1513	37.6028, -79.2474
Campbell	HazMat Facility	BANKER STEEL CO LLC	205 FRAZIER RD	LYNCHBURG	24502	37.6931, -79.0817
Campbell	HazMat Facility	BWX TECHNOLOGIES INC - R&D (CLOSED)	319 RUTHERFORD ST	LYNCHBURG	24504-5448	37.4155, -79.1196
Campbell	HazMat Facility	SCHRADER-BRIDGEPORT INTERNATIONAL	3700 MAYFLOWER DR	ALTAVISTA	24517-1020	37.5536, -79.1392
Campbell	HazMat Facility	DOMINION - ALTAVISTA POWER STATION	1320 WARDS FERRY RD	ALTAVISTA	24517	37.3491, -78.8166
Campbell	HazMat Facility	LYNCHBURG CASTING INDUSTRIES	4615 MURRAY PL	LYNCHBURG	24504	37.3449, -78.8262
Campbell	HazMat Facility	BROOKNEAL CHIP MILL	1 ABRASIVE AVE	BROOKNEAL	24528	37.3524, -78.8381



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Campbell	HazMat Facility	DAN RIVER INC - BROOKNEAL PLANT 2 (CLOSED)	586 THOMAS RD	BROOKNEAL	24528	37.3558, -78.8254
Campbell	HazMat Facility	A.O. SMITH ELECTRICAL PRODUCTS COMPANY (CLOSED)	4800 BOONSBORO RD	ALTAVISTA	24517-1040	37.3594, -78.8340
Campbell	HazMat Facility	FRAMATOME INC.	6185 DUNDEE RD	LYNCHBURG	24504	37.2865, -79.8352
Campbell	Historic Site	BLENHEIM	3906 NOWLINS MILL RD	CONCORD	24538	37.3885, -79.2419
Campbell	Historic Site	MOUNT ATHOS	1638 MT ATHOS RD	LYNCHBURG	24504	37.3697, -79.4976
Campbell	Historic Site	FEDERAL HILL	724 TURKEY FOOT RD	FOREST	24551	37.3693, -79.3096
Campbell	Historic Site	WALNUT HILL	129 JOHNSON MOUNTAIN RD	EVINGTON	24550	37.2627, -79.7807
Campbell	Historic Site	HARPERS MILL	3771 HAT CREEK RD	BROOKNEAL	24528	37.1634, -79.4718
Campbell	Historic Site	IVANHOE	302 IVANHOE TRAIL	LYNCHBURG	24504	37.3761, -79.3033
Campbell	Historic Site	THE ROCK HOUSE	10456 BEAR CREEK RD	GLADYS	24554	37.3717, -79.4980
Campbell	Historic Site	BELMONT FARMS	10273 LEESVILLE RD	EVINGTON	24550	37.3272, -79.5251
Campbell	Historic Site	CAT ROCK SLUICE	STAUNTON SCENIC RIVER MILE 9.85	BROOKNEAL	24528	37.1860, -79.6125
Campbell	Historic Site	PHILLIPS-ROBERTSON	2086 DEARBORN RD	EVINGTON	24550	37.3759, -79.7084
Campbell	Historic Site	CAREYSWOOD	8291 COLONIAL HWY	EVINGTON	24550	37.3066, -79.3056
Campbell	Historic Site	GREEN HILL	378 PANNILLS RD	GLADYS	24554	37.3648, -79.4338
Campbell	Historic Site	GROVE PLANTATION	151 CLOSEBURN MANOR DR	LYNCHBURG	24502	37.3263, -79.5357
Campbell	Historic Site	HISTORIC COURTHOUSE	774 VILLAGE HWY	RUSTBURG	24588	37.3394, -79.5217
Campbell	Historic Site	NEW GLASGO	2839 LEESVILLE RD	LYNCH STATION	24571	37.3407, -79.5320
Campbell	Historic Site	OAKDALE	384 MOSEBROOK DR	GLADYS	24554	37.5314, -79.4161
Campbell	Historic Site	RED HILL	1250 RED HILL RD	BROOKNEAL	24528	37.4529, -79.2608
Campbell	Historic Site	SIX MILE BRIDGE	MOUNT ATHOS RD & JAMES RIVER	LYNCHBURG	24504	37.2254, -79.5179
Campbell	Historic Site	THE MANSION	1580 MANSION BRIDGE RD	ALTAVISTA	24517	37.3757, -79.3079
Campbell	Historic Site	SHADY GROVE	3159 MOLLIES CREEK RD	GLADYS	24554	37.2412, -79.6228



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Campbell	Historic Site	WHITEHALL	910 WHITEHALL RD	LONG ISLAND	24569	37.2411, -79.6264
Campbell	Historic Site	OAK GROVE	7940 GLADYS RD	ALTAVISTA	24517	37.2716, -79.7898
Campbell	Large Population Venue	ALTAVISTA AREA YMCA FAMILY CENTER	1000 FRANKLIN AVE	ALTAVISTA	24517	37.3539, -79.6076
Campbell	Law Enforcement	BROOKNEAL POLICE DEPARTMENT	1971 UNIVERSITY BLVD	BROOKNEAL	24528	37.3567, -79.2884
Campbell	Law Enforcement	ALTAVISTA POLICE DEPARTMENT	907 CLAY ST	ALTAVISTA	24517	37.1967, -79.0848
Campbell	Law Enforcement	CAMPBELL COUNTY SHERIFFS OFFICE	905 COURT ST	RUSTBURG	24588	37.3394, -79.2598
Campbell	Law Enforcement	LYNCHBURG REGIONAL AIRPORT POLICE DEPARTMENT	521 COLONY RD	LYNCHBURG	24502	37.3407, -79.2326
Campbell	Law Enforcement	VIRGINIA STATE POLICE DIVISION 3 AREA 20 - LYNCHBURG	3506 WARDS RD	LYNCHBURG	24502	37.3270, -79.1455
Campbell	Schools	BETHEL MENNONITE SCHOOL	19965 LEESVILLE RD	GLADYS	24554	37.3213, -79.1857
Campbell	Schools	TIMBERLAKE CHRISTIAN SCHOOLS	479 CAMP NINE RD	FOREST	24551	37.1324, -79.2831
Campbell	Schools	TREE OF LIFE ACADEMY	201 VILLAGE HWY	LYNCHBURG	24502	37.1095, -79.2953
Campbell	Schools	CLEARVIEW CHRISTIAN SCHOOL	1671 VILLAGE HWY	RUSTBURG	24588	37.0521, -78.9443
Campbell	Schools	DESMOND T DOSS JR ACADEMY	555 VILLAGE HWY	LYNCHBURG	24502	37.3457, -79.2355
Campbell	Schools	ALTAVISTA ELEMENTARY	155 BEE DR	ALTAVISTA	24517	37.3458, -79.2396
Campbell	Schools	ALTAVISTA HIGH	474 WILLIAM CAMPBELL DR	ALTAVISTA	24517	37.2519, -79.1824
Campbell	Schools	BROOKNEAL ELEMENTARY	377 DENNIS RIDDLE DR	BROOKNEAL	24528	37.3360, -78.9787
Campbell	Schools	BROOKVILLE HIGH	377 DENNIS RIDDLE DR	LYNCHBURG	24502	37.2519, -79.1824
Campbell	Schools	BROOKVILLE MIDDLE	400 V E S RD	LYNCHBURG	24502	37.3278, -79.2186
Campbell	Schools	CAMPBELL COUNTY TECHNICAL CENTER	693 LEESVILLE RD	RUSTBURG	24588	37.2672, -79.0683
Campbell	Schools	CONCORD ELEMENTARY	2125 LANGHORNE RD	CONCORD	24538	37.2690, -79.1076
Campbell	Schools	CORNERSTONE LEARNING CENTER	5039 BOONSBORO RD	RUSTBURG	24588	37.2766, -79.0849
Campbell	Schools	LEESVILLE ROAD ELEMENTARY	520 ELDON ST	LYNCHBURG	24502	37.2739, -79.1036
Campbell	Schools	RUSTBURG CORRECTIONAL CENTER UNIT #9	3024 FOREST HILLS CIR	RUSTBURG	24588	37.3438, -79.2375
Campbell	Schools	RUSTBURG ELEMENTARY	122 FLEETWOOD DR	RUSTBURG	24588	37.1131, -79.0069
Campbell	Schools	RUSTBURG HIGH	1517 JACKSON ST	RUSTBURG	24588	37.2519, -79.1853
Campbell	Schools	RUSTBURG MIDDLE	401 MONTICELLO AVE	RUSTBURG	24588	37.2519, -79.1853



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Campbell	Schools	TOMAHAWK ELEMENTARY	1350 LIGGATES RD	LYNCHBURG	24502	37.4533, -79.1909
Campbell	Schools	WILLIAM CAMPBELL HIGH	501 LEESVILLE RD	GLADYS	24554	37.3435, -79.2054
Campbell	Schools	YELLOW BRANCH ELEMENTARY	3020 WARDS FERRY RD	RUSTBURG	24588	37.4125, -79.1778
Campbell	Schools	YELLOW BRANCH ELEMENTARY ANNEX	409 PERRYMONT AVE	RUSTBURG	24588	37.4446, -79.2268
Campbell	Service Authority	CAMPBELL COUNTY UTILITY AND SERVICE AUTHORITY OFFICE	180 MOSELEY LN	RUSTBURG	24502	37.3987, -79.1724
Campbell	Sewer Pump Station	OAKDALE PUMP STATION	300 COOPER WAY	LYNCHBURG	24502	37.4171, -79.2055
Campbell	Sewer Pump Station	LEESVILLE ROAD PUMP STATION	103 LYNBROOK RD	LYNCHBURG	24502	37.3956, -79.2061
Campbell	Sewer Pump Station	RUSTBURG 886 PUMP STATION	350 DENNIS RIDDLE DR	RUSTBURG	24588	37.4057, -79.1441
Campbell	Sewer Pump Station	WHITESTONE PUMP STATION	228 MONICA BLVD	LYNCHBURG	24502	37.4044, -79.1798
Campbell	Sewer Pump Station	SHEETZ PUMP STATION	468 EWING DR	LYNCHBURG	24502	37.3863, -79.1744
Campbell	Sewer Pump Station	RUSTBURG 501 PUMP STATION	585 CHRISTIAN SPRINGS RD	RUSTBURG	24588	37.3622, -79.2083
Campbell	Sewer Pump Station	RUSTBURG ELEMENTARY SCHOOL PUMP STATION	967 ROSES MILL RD	RUSTBURG	24588	37.3609, -79.2059
Campbell	Sewer Pump Station	RUSTBURG WWTP PUMP STATION	153 HISTORIC RIVERVIEW WAY	RUSTBURG	24588	37.3895, -79.1882
Campbell	Sewer Pump Station	LAWYERS ROAD PUMP STATION	179 RANDOLPH ST	LYNCHBURG	24501	37.4184, -79.1953
Campbell	Sewer Pump Station	FLAT CREEK PUMP STATION	165 ROYAL CIR	LYNCHBURG	24501	37.4167, -79.1931
Campbell	Sewer Pump Station	460 EAST PUMP STATION	110 SUBSTATION LN	LYNCHBURG	24502	37.4074, -79.1467
Campbell	Sewer Pump Station	TIMBERLAKE BAPTIST CHURCH PUMP STATION	139 INDUSTRIAL PARK DR	LYNCHBURG	24502	37.4515, -79.2067
Campbell	Sewer Pump Station	BRAXTON PARK PUMP STATION	245 NIKONHA LN	LYNCHBURG	24502	37.3895, -79.1882
Campbell	Sewer Pump Station	LEESVILLE ESTATES PUMP STATION	3389 S AMHERST HWY	EVINGTON	24550	37.4057, -79.1512
Campbell	Sewer Pump Station	LYNBROOK PUMP STATION	1915 MISTOVER DR	RUSTBURG	24588	37.3808, -79.2037
Campbell	Sewer Pump Station	YELLOW BRANCH PUMP STATION	302 FALLING CREEK RD	RUSTBURG	24588	37.3603, -79.1722
Campbell	Sewer Pump Station	LIBERTY RIDGE PUMP STATION	281 CO OP LN	LYNCHBURG	24502	37.3796, -79.2022
Campbell	Sewer Pump Station	SENECA PARK PUMP STATION	7666 WATT ABBITT RD	RUSTBURG	24588	37.3658, -79.1898
Campbell	Sewer Pump Station	CAMPBELL CO UTIL AND SERV AUTH/SEWER PUMP STATION	9645 LEESVILLE RD	EVINGTON	24550	37.3978, -79.1670



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Campbell	Special Population Facility - Nursing Home	AUTUMN CARE OF ALTAVISTA	208 GRISTMILL RD	ALTAVISTA	24517	37.3918, -79.1410
Campbell	Special Population Facility - Nursing Home	RUNK AND PRATT AT LIBERTY RIDGE	501 VES RD	LYNCHBURG	24502	37.3940, -79.1373
Campbell	Special Population Facility - Nursing Home	RUNK & PRATT RESIDENTIAL ADULT CARE OF LYNCHBURG	1213 LONG MEADOWS DR	LYNCHBURG	24502	37.4227, -79.1467
Campbell	Special Population Facility - Nursing Home	LIBERTY RIDGE HEALTH & REHAB CENTER	104 WOOD LN	LYNCHBURG	24502	37.3609, -79.2059
Campbell	Special Population Facility - Nursing Home	HERITAGE HALL-BROOKNEAL	6007 LEE JACKSON HWY	BROOKNEAL	24528	37.4384, -79.2112
Campbell	Special Populations Facility - Detention Facility	RUSTBURG CORRECTIONAL UNIT #9	156 DAVIS ST	RUSTBURG	24588	37.4134, -79.1639
Campbell	Special Populations Facility - Detention Facility	CAMPBELL COUNTY ADULT DETENTION CENTER	229 DANCING CREEK RD	RUSTBURG	24588	37.4074, -79.1660
Campbell	Wastewater Treatment Plant	BROOKNEAL TOWN - FALLING RIVER	9645 LEESVILLE RD	BROOKNEAL	24528	37.4313, -79.1229
Campbell	Wastewater Treatment Plant	BROOKNEAL TOWN - STAUNTON RIVER	130 COMMERCE ST	BROOKNEAL	24528	37.3390, -79.2378
Campbell	Wastewater Treatment Plant	OTTER RIVER WATER TREATMENT PLANT	9625 LEESVILLE RD	EVINGTON	24550	37.5917, -79.0524
Campbell	Wastewater Treatment Plant	ALTAVISTA WASTEWATER PLANT	1200 LANE ACCESS RD	ALTAVISTA	24517	37.3662, -78.8433
Campbell	Wastewater Treatment Plant	CONCORD WASTEWATER PLANT	9405 VILLAGE HWY	CONCORD	24538	37.3670, -78.8281
Campbell	Wastewater Treatment Plant	RUSTBURG WASTEWATER PLANT	180 MOSELEY LN	RUSTBURG	24588	37.3656, -78.8299
Campbell	Wastewater Treatment Plant	ALTAVISTA WATER TREATMENT PLANT	20 RICKY VAN SHELTON DR	HURT	24563	37.3481, -78.8272
Campbell	Water Booster Pump Station	RT 24 FINISHED PUMP STATION	1132 MOUNTAIN WATER DR	EVINGTON	24550	37.1722, -79.6121
Campbell	Water Booster Pump Station	RT 622 PUMP STATION	208 GRANDVIEW DR	LYNCHBURG	24501	37.3412, -79.5171
Campbell	Water Storage Facility	WATER TANK	572 WAUGHS FERRY RD	CONCORD	51031	37.1516, -79.6488
Campbell	Water Storage Facility	OTTER RIVER WATER TANK	1162 UNION HILL RD	EVINGTON	24550	37.1820, -79.6157
Campbell	Water Storage Facility	EVINGTON WATER TANK	114 HUNTER RD	EVINGTON	24550	37.1408, -79.6169
Campbell	Water Storage Facility	RUSTBURG WATER TANK	221 MAIN ST	RUSTBURG	24588	37.3953, -79.2606
Campbell	Water Storage Facility	STEEL STORAGE TANK - BRIARCLIFF	45 LIVESTOCK RD	LYNCHBURG	24502	37.3707, -79.3107
Campbell	Water Storage Facility	CONCORD WATER TANK	1803 SUNBURST RD	CONCORD	24538	37.3845, -79.3008
Campbell	Water Storage Facility	ELEVATED STEEL STORAGE TANK	2537 DEARING FORD RD	LYNCHBURG	24502	37.3894, -79.5516



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Campbell	Water Storage Facility	WATER TANK	955 RANDOLPH LN	ALTAVISTA	24517	37.3129, -79.4887
Campbell	Water Storage Facility	WATER TANK #2	20335 LEESVILLE RD	ALTAVISTA	24517	37.3027, -79.3246
Campbell	Water Storage Facility	WATER TANK	4520 CANDLERS MOUNTAIN RD	ALTAVISTA	24517	37.3524, -79.5363
Campbell	Water Storage Facility	WATER TANK	4821 FORT AVE	ALTAVISTA	24517	37.3501, -79.5097
Campbell	Water Storage Facility	STEEL WATER TANK	302 MOUNTAINVIEW DR	BROOKNEAL	24528	37.3368, -79.5602
Campbell	Water Storage Facility	STEEL WATER TANK	139 HIGHVIEW DR	BROOKNEAL	24528	37.3504, -79.5224
Campbell	Water Storage Facility	TANGLEWOOD STORAGE TANK	139 WRIGHT SHOP RD	RUSTBURG	24502	37.3559, -79.5081
Campbell	Water Storage Facility	ELEVATED STEEL STORAGE TANK	116 LYTTLETON LN	EVINGTON	24502	37.3189, -79.5029
Campbell	Water Storage Facility	ALTAVISTA WATER TOWER	137 SMOKEY HOLLOW RD	ALTAVISTA	24517	37.3537, -79.5212
Campbell	Water Storage Facility	NARUNA WATER SYSTEM STEEL GROUND STORAGE TANK	211 COMMUNITY LN	GLADYS	24576	37.3788, -79.7098
Campbell	Water Storage Facility	LEESVILLE ROAD STORAGE TANK	201 DEERWOOD DR	LYNCHBURG	24505	37.0934, -79.5646
Campbell	Water Storage Facility	500,000 GALLON WATER TANK	223 FOX RUNN DR	LYNCHBURG	24505	37.0985, -79.5831
Lynchburg	Airport	FALWELL AIRPORT	4306 RICHMOND HWY	LYNCHBURG	24501	37.0874, -79.5700
Lynchburg	Attractions	LYNCHBURG MUSEUM	901 COURT ST	LYNCHBURG	24504	37.3388, -79.4941
Lynchburg	Attractions	POINT OF HONOR MUSEUM	112 CABELL ST	LYNCHBURG	24504	37.0964, -79.5785
Lynchburg	Attractions	LEGACY MUSEUM OF AFRICAN AMERICAN HISTORY	403 MONROE ST	LYNCHBURG	24504	37.0877, -79.5715
Lynchburg	Attractions	ANN SPENCER HOUSE & GARDEN MUSEUM	1313 PIERCE ST	LYNCHBURG	24501	37.4284, -79.2657
Lynchburg	Attractions	MAIER MUSEUM OF ART	1 QUINLAN ST	LYNCHBURG	24503	37.0902, -79.5649
Lynchburg	Attractions	OLD CITY CEMETERY	206 MONROE ST	LYNCHBURG	24504	37.0923, -79.5690
Lynchburg	Attractions	HISTORIC SANDUSKY FOUNDATION - CIVIL WAR MUSEUM	757 SANDUSKY DR	LYNCHBURG	24502	37.3756, -79.3006
Lynchburg	Attractions	AMAZEMENT SQUARE CHILD MUSEUM	27 9TH ST	LYNCHBURG	24504	37.3418, -79.2340
Lynchburg	College	SYLVAIN MELLOUL INTERNATIONAL HAIR ACADEMY	3405 CANDLERS MOUNTAIN RD	LYNCHBURG	24502	37.3294, -79.2170
Lynchburg	College	VIRGINIA UNIVERSITY OF LYNCHBURG	2058 GARFIELD AVE	LYNCHBURG	24501	37.2768, -79.1071
Lynchburg	College	LYNCHBURG COLLEGE	1501 LAKESIDE DR	LYNCHBURG	24501	37.3234, -79.2479



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Lynchburg	College	MILLER-MOTTE TECHNICAL COLLEGE- LYNCHBURG	1011 CREEKSIDE LN	LYNCHBURG	24502	37.3254, -79.1924
Lynchburg	College	RANDOLPH COLLEGE	2500 RIVERMONT AVE	LYNCHBURG	24503	37.2795, -79.1011
Lynchburg	College	CENTRAL VIRGINIA COMMUNITY COLLEGE	3506 WARDS RD	LYNCHBURG	24502	37.2698, -79.1067
Lynchburg	College	LIBERTY UNIVERSITY	1971 UNIVERSITY BLVD	LYNCHBURG	24515	37.2723, -79.0980
Lynchburg	College	CENTRA COLLEGE OF NURSING	905 LAKESIDE DR SUITE A	LYNCHBURG	24501	37.3138, -79.1947
Lynchburg	College	AMERICAN NATIONAL UNIVERSITY - LYNCHBURG VA CAMPUS	104 CANDLEWOOD CT	LYNCHBURG	24502	37.3096, -79.1830
Lynchburg	Communication Facility	WLLL - AM - HUBBARD'S ADVERTISING AGENCY, INC.	319 CHAPEL LN	LYNCHBURG	24501	37.3414, -79.1840
Lynchburg	Communication Facility	WLVA - AM - TRUTH BROADCASTING CORPORATION	122 BEACON HILL PL	LYNCHBURG	24503	37.3308, -79.2464
Lynchburg	Electrical Substation	ELECTRICAL SUBSTATION	200 AMELON SQUARE	LYNCHBURG	24501	37.3248, -79.2589
Lynchburg	Electrical Substation	ELECTRICAL SUBSTATION	1368 AMERICAN WAY	LYNCHBURG	24501	37.3027, -79.2425
Lynchburg	Electrical Substation	ELECTRICAL SUBSTATION	22 LEXINGTON PARK DR	LYNCHBURG	24501	37.2895, -79.1699
Lynchburg	Electrical Substation	ELECTRICAL SUBSTATION	9625 LEESVILLE RD	LYNCHBURG	24504	37.2510, -79.1847
Lynchburg	Electrical Substation	AEP ELECTRICAL SUBSTATION	11418 LEESVILLE RD	LYNCHBURG	24504	37.3349, -79.1752
Lynchburg	Electrical Substation	ELECTRICAL SUBSTATION	154 SPRING MILL RD	LYNCHBURG	24503	37.2364, -79.1732
Lynchburg	Electrical Substation	ELECTRICAL SUBSTATION	111 OAKDALE CIR	LYNCHBURG	24503	37.6091, -79.0384
Lynchburg	Electrical Substation	ELECTRICAL SUBSTATION	521 WISE ST	LYNCHBURG	24503	37.2075, -79.2997
Lynchburg	Electrical Substation	ELECTRICAL SUBSTATION	521 WISE ST	LYNCHBURG	24502	37.1240, -79.2881
Lynchburg	Electrical Substation	ELECTRICAL SUBSTATION	1301 PARK AVE	LYNCHBURG	24502	37.3376, -79.1735
Lynchburg	Electrical Substation	ELECTRICAL SUBSTATION	1618 MELINDA DR	LYNCHBURG	24501	37.3782, -79.2364
Lynchburg	Electrical Substation	ELECTRICAL SUBSTATION	1618 MELINDA DR	LYNCHBURG	24503	37.4127, -79.1760
Lynchburg	Emergency Operations Center	LYNCHBURG CITY EMERGENCY COMMUNICATION CENTER	179 MORTON LN	LYNCHBURG	24502	37.3429, -79.5349
Lynchburg	Energy Facility	REUSENS DAM HYDRO PLANT	4467 S. AMHERST HWY	LYNCHBURG	24503	37.3116, -79.5016
Lynchburg	Fire Stations	LYNCHBURG FIRE DEPARTMENT STATION 4 - BIRCH STREET	1128 SHINGLE BLOCK RD	LYNCHBURG	24503	37.4083, -79.1758
Lynchburg	Fire Stations	LYNCHBURG FIRE DEPARTMENT STATION 7 - LAKESIDE DRIVE	8569 BROOKNEAL HWY	LYNCHBURG	24501	37.3684, -79.1815



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Lynchburg	Fire Stations	LYNCHBURG FIRE DEPARTMENT STATION 8 - OLD GRAVES MILL ROAD	1570 MOUNT ATHOS RD	LYNCHBURG	24502	37.4026, -79.1419
Lynchburg	Fire Stations	LYNCHBURG FIRE DEPARTMENT STATION 5 - PEAKLAND	1305 FALLING CREEK RD	LYNCHBURG	24503	37.3309, -79.2169
Lynchburg	Fire Stations	LYNCHBURG FIRE DEPARTMENT STATION 2 - GRACE STREET	1220 BANDY MILL RD	LYNCHBURG	24504	37.5791, -79.0377
Lynchburg	Fire Stations	LYNCHBURG FIRE DEPARTMENT STATION 3 - FORT HILL	4201 MURRAY PL	LYNCHBURG	24502	37.3254, -79.5454
Lynchburg	Fire Stations	LYNCHBURG FIRE DEPARTMENT STATION 6 - MILLER PARK	10643 STEWARTSVILLE RD	LYNCHBURG	24501	37.3785, -79.2379
Lynchburg	Fire Stations	R R DONNELLEY INCORPORATED FIRE BRIGADE	10624 COLONIAL HWY	LYNCHBURG	24501	37.3758, -79.2467
Lynchburg	Fire Stations	LYNCHBURG FIRE DEPARTMENT STATION 1 - CLAY STREET	4893 LEXINGTON TPKE	LYNCHBURG	24504	37.4508, -79.1909
Lynchburg	Gas Facility	GAS FACILITY	119 TAYLOR ST	LYNCHBURG	24504	37.4358, -79.1848
Lynchburg	HazMat Facility	WESTROCK CONVERTING COMPANY	1801 CONCORD TPKE	LYNCHBURG	24504-3637	37.3365, -79.1762
Lynchburg	HazMat Facility	HANSON INDUSTRIES INC	3300 JOHN CAPRON RD.	LYNCHBURG	24501-5042	37.4130, -79.1824
Lynchburg	HazMat Facility	U.S. PIPE (FORMER GRIFFIN PIPE PRODUCTS CO LLC)	10 ADAMS ST	LYNCHBURG	24504	37.0422, -78.9320
Lynchburg	HazMat Facility	GNB INC	2800 CARROLL AVE.	LYNCHBURG	24501-4911	37.3558, -79.2416
Lynchburg	HazMat Facility	WAYTEC ELECTRONICS CORP	1104 MCCONVILLE RD.	LYNCHBURG	24502	37.3535, -78.8473
Lynchburg	HazMat Facility	SLOCUM ADHESIVES CORPORATION	1409 BUCHANAN ST	LYNCHBURG	24501	37.5791, -79.0572
Lynchburg	HazMat Facility	PEPSI BOTTLING GROUP	121 BRADLEY DR	LYNCHBURG	24502	37.3717, -79.1993
Lynchburg	HazMat Facility	C.R. HUDGINS PLATING, INC.	800 CRADDOCK ST	LYNCHBURG	24502	37.3466, -78.8254
Lynchburg	HazMat Facility	OLD DOMINION WOOD PRODUCTS	9363 LEE JACKSON HWY	LYNCHBURG	24505	37.3981, -79.7539
Lynchburg	HazMat Facility	ALLEN-MORRISON SIGNAGE COMPANY	104 WOOD LN	LYNCHBURG	24501	37.4077, -79.1725
Lynchburg	HazMat Facility	PARKER HANNIFIN CORPORATION - POWERTRAIN DIVISION	1000 DILLARD DR	LYNCHBURG	24501-5023	37.3571, -79.2415
Lynchburg	HazMat Facility	LYNCHBURG FOUNDRY CO LOWER BASIN PLANT	3550 MAYFLOWER DR	LYNCHBURG	24504	37.3446, -79.5075
Lynchburg	HazMat Facility	SMITH MOUNTAIN INDUSTRIES INC	1191 VENTURE DR.	FOREST	24551	37.2673, -79.0678



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Lynchburg	HazMat Facility	BANKER STEEL CO LLC - 30997	3420 CANDLERS MOUNTAIN RD	LYNCHBURG	24501	37.4088, -79.0947
Lynchburg	HazMat Facility	DELTA STAR INC.	11685 W LYNCHBURG SALEM TPKE	LYNCHBURG	24501	37.3940, -79.1371
Lynchburg	HazMat Facility	SIMPLIMATIC ENG CO	ONE MILLRACE DR	LYNCHBURG	24502-2908	37.5854, -79.0498
Lynchburg	HazMat Facility	DAVIS FROST INC	4225 MURRAY PL	LYNCHBURG	24506	37.3375, -79.5083
Lynchburg	HazMat Facility	NORCRAFT COMPANIES	813 LYNCHBURG AVE	LYNCHBURG	24502	37.3555, -78.8308
Lynchburg	HazMat Facility	WORLD COLOR PROCUREMENT LLC (CLOSED)	1070 OIL TERMINAL RD	LYNCHBURG	24501	37.2774, -79.1029
Lynchburg	HazMat Facility	CB FLEET CO	5114 WOODALL RD	LYNCHBURG	24506	37.4127, -79.1451
Lynchburg	HazMat Facility	WESTOVER DAIRY	1000 ROBINS RD	LYNCHBURG	24506	37.4065, -79.1571
Lynchburg	HazMat Facility	RR DONNELLEY PRINTING COMPANY	1724 MOUNT ATHOS RD	LYNCHBURG	24501-5099	37.3719, -79.7094
Lynchburg	HazMat Facility	PORTERS GROUP LLC	2006 GRACE ST	LYNCHBURG	24506	37.3552, -78.8155
Lynchburg	HazMat Facility	FLOWSERVE CORPORATION	2084 FORT AVE	LYNCHBURG	24502	37.0522, -78.9340
Lynchburg	HazMat Facility	TRI TECH LABORATORIES INC	984 AIRPORT RD	LYNCHBURG	24504-3516	37.3336, -79.5067
Lynchburg	Large Population Venue	CITY STADIUM	215 EAST MAIN ST	LYNCHBURG	24501	37.0376, -78.9391
Lynchburg	Large Population Venue	LIBERTY VINES CONVOCATION CENTER	1345 FALLING CREEK RD	LYNCHBURG	24502	37.5844, -79.0304
Lynchburg	Large Population Venue	ACADEMY CENTER OF THE ARTS	115 TAYLOR ST	LYNCHBURG	24504	37.1721, -79.6131
Lynchburg	Law Enforcement	BABCOCK AND WILCOX POLICE DEPARTMENT	1229 COUNTY FARM RD	LYNCHBURG	24504	37.3278, -78.8500
Lynchburg	Law Enforcement	LIBERTY UNIVERSITY POLICE DEPARTMENT	1902 GRACE ST	LYNCHBURG	24502	37.3968, -79.1141
Lynchburg	Law Enforcement	LYNCHBURG CITY SHERIFFS OFFICE	20212 LEESVILLE RD	LYNCHBURG	24504	37.4846, -79.1664
Lynchburg	Law Enforcement	LYNCHBURG POLICE DEPARTMENT	173 BROCKMAN PARK DR	LYNCHBURG	24504	37.1405, -79.6163
Lynchburg	Law Enforcement	CENTRAL VIRGINIA COMMUNITY COLLEGE POLICE	201 LILLIAN LN	LYNCHBURG	24502	37.2113, -79.2988
Lynchburg	Public Health	VIRGINIA BAPTIST HOSPITAL	510 7TH ST	LYNCHBURG	24503	37.3788, -79.5592
Lynchburg	Public Health	CENTRA SPECIALTY HOSPITAL	87 COURTHOUSE LN	LYNCHBURG	24503	37.6003, -79.0356
Lynchburg	Public Health	SURGERY CENTER OF LYNCHBURG	4308 WARDS RD	LYNCHBURG	24501	37.1123, -79.2740



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Lynchburg	Public Health	LYNCHBURG GENERAL HOSPITAL	1065-G AIRPORT RD	LYNCHBURG	24501	37.3364, -78.9771
Lynchburg	Public Shelter - Cooling Center	COLLEGE HILL CENTER	811 JACKSON ST	LYNCHBURG	24504	37.2729, -79.0977
Lynchburg	Public Shelter - Cooling Center	SALVATION ARMY	2211 PARK AVE	LYNCHBURG	24501	37.1045, -79.2833
Lynchburg	Schools	VIRGINIA EPISCOPAL SCHOOL	2501 LINKHORNE DR	LYNCHBURG	24503	37.3506, -78.8111
Lynchburg	Schools	BRIDGES TREATMENT CENTER	2525 LINKHORNE DR	LYNCHBURG	24502	37.3897, -79.5531
Lynchburg	Schools	HOLY CROSS REGIONAL CATHOLIC SCHOOL	1208 POLK ST	LYNCHBURG	24501	37.4969, -79.2465
Lynchburg	Schools	JAMES RIVER DAY SCHOOL	4641 LOCKSVIEW RD	LYNCHBURG	24503	37.0640, -79.5463
Lynchburg	Schools	NEW VISTAS SCHOOL	409 PERRYMONT AVE	LYNCHBURG	24501	37.0667, -79.5411
Lynchburg	Schools	RIVERMONT SCHOOL	1201 FLOYD ST	LYNCHBURG	24501	37.4396, -79.2746
Lynchburg	Schools	NEW COVENANT SCHOOLS	5828 APACHE LN	LYNCHBURG	24501	37.2348, -79.2367
Lynchburg	Schools	LYNCHBURG DAY SERVICES	100 MOUNTAIN VIEW RD	LYNCHBURG	24504	37.3147, -79.2263
Lynchburg	Schools	LAUREL REGIONAL SPECIAL EDUCATION CENTER	805 CHINOOK PL	LYNCHBURG	24501	37.3402, -78.9882
Lynchburg	Schools	FORT HILL COMMUNITY SCHOOL	115 KENWOOD PL	LYNCHBURG	24502	37.2109, -79.2992
Lynchburg	Schools	HERITAGE ELEMENTARY	600 MANSFIELD AVE	LYNCHBURG	24502	37.2315, -79.2848
Lynchburg	Schools	HERITAGE HIGH	1730 SEABURY AVE	LYNCHBURG	24502	37.2790, -79.0892
Lynchburg	Schools	HUTCHERSON EARLY LEARNING CENTER	1400 FLORIDA AVE	LYNCHBURG	24502	37.3250, -79.2276
Lynchburg	Schools	LINKHORNE ELEMENTARY	405 CABELL ST	LYNCHBURG	24503	37.3345, -78.9764
Lynchburg	Schools	LINKHORNE MIDDLE	3020 WARDS FERRY RD	LYNCHBURG	24503	37.3404, -79.2361
Lynchburg	Schools	PAUL LAURENCE DUNBAR MIDDLE FOR INNOVATION	4330 MORNINGSIDE DR	LYNCHBURG	24504	37.3548, -79.1686
Lynchburg	Schools	PAUL MUNRO ELEMENTARY	210 SMYTH ST	LYNCHBURG	24503	37.4114, -79.1549
Lynchburg	Schools	PERRYMONT ELEMENTARY	2111 MEMORIAL AVE	LYNCHBURG	24502	37.4113, -79.1542
Lynchburg	Schools	ROBERT S. PAYNE ELEMENTARY	241 HANGER RD	LYNCHBURG	24501	37.4107, -79.1548
Lynchburg	Schools	SANDUSKY ELEMENTARY	7901 RICHMOND HWY	LYNCHBURG	24502	37.1270, -79.2904
Lynchburg	Schools	LIBERTY CHRISTIAN ACADEMY	562 JONES ST	LYNCHBURG	24502	37.1271, -79.2903
Lynchburg	Schools	SANDUSKY MIDDLE	419 JONES ST	LYNCHBURG	24502	37.1382, -79.2685
Lynchburg	Schools	SHEFFIELD ELEMENTARY SCHOOL	148 HUNTER ST	LYNCHBURG	24502	37.1135, -79.2989



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Lynchburg	Schools	T.C. MILLER ELEMENTARY FOR INNOVATION	1622 WHITE HOUSE RD	LYNCHBURG	24501	37.5637, -79.0741
Lynchburg	Schools	WILLIAM M. BASS ELEMENTARY	999 ELM ST	LYNCHBURG	24501	37.5600, -79.0178
Lynchburg	Schools	LYNCHBURG JUVENILE DETENTION HOME	1436 BRIDGEWATER BAY DR	LYNCHBURG	24501	37.0616, -78.9495
Lynchburg	Schools	CROSSROADS / SINGLE POINT OF ENTRY	13080 S OLD MONETA RD	LYNCHBURG	24504	37.0472, -78.9428
Lynchburg	Schools	CENTRAL VIRGINIA GOVERNOR'S SCHOOL	1442 RADFORD CHURCH RD	LYNCHBURG	24502	37.2783, -79.1650
Lynchburg	Schools	BEDFORD HILLS ELEMENTARY	2474 COTTONTOWN RD	LYNCHBURG	24503	37.3098, -79.2552
Lynchburg	Schools	DEARINGTON ELEMENTARY / INNOVATION	101 ASHWOOD DR	LYNCHBURG	24501	37.1437, -79.2665
Lynchburg	Schools	E.C. GLASS HIGH	1715 HELMSDALE DR	LYNCHBURG	24501	37.1334, -79.0244
Lynchburg	Special Population Facility - Nursing Home	BENTLEY COMMONS AT LYNCHBURG	1201 LANGHORNE RD	LYNCHBURG	24502	37.4490, -79.2456
Lynchburg	Special Population Facility - Nursing Home	MEDICAL CARE CENTER	189 MONICA BLVD	LYNCHBURG	24501	37.4454, -79.2753
Lynchburg	Special Population Facility - Nursing Home	CARRINGTON, THE	1320 ENTERPRISE DR	LYNCHBURG	24501	37.3549, -79.1690
Lynchburg	Special Population Facility - Nursing Home	LYNCHBURG HEALTH & REHABILITATION CENTER	STATE ROUTE 691	LYNCHBURG	24502	37.3819, -79.1819
Lynchburg	Special Population Facility - Nursing Home	GUGGENHEIMER HEALTH AND REHAB CENTER	108-112 SENIOR ST	LYNCHBURG	24504	37.3319, -79.2153
Lynchburg	Special Population Facility - Nursing Home	HERITAGE GREEN ASSISTED LIVING	2249 MURRELL RD	LYNCHBURG	24502	37.3441, -79.1734
Lynchburg	Special Population Facility - Nursing Home	WESTMINSTER CANTERBURY OF LYNCHBURG	1350 LONGWOOD AVE	LYNCHBURG	24503	37.3817, -79.1821
Lynchburg	Special Population Facility - Nursing Home	WILLIAMS HOME INCORPORATED	1477 DRAPER RD.	LYNCHBURG	24503	37.2703, -78.6845
Lynchburg	Special Population Facility - Nursing Home	AVANTE AT LYNCHBURG	9363 LEE JACKSON HWY	LYNCHBURG	24501	37.2710, -79.8533
Lynchburg	Special Population Facility - Nursing Home	SUMMIT ASSISTED LIVING	4839 HOLCOMB ROCK RD	LYNCHBURG	24502	37.4900, -79.1360
Lynchburg	Special Population Facility - Nursing Home	VALLEY VIEW RETIREMENT COMMUNITY	2074 FORD RD	LYNCHBURG	24502	37.4759, -79.1175
Lynchburg	Special Population Facility - Nursing Home	THE ELMS OF LYNCHBURG	479 CAMP NINE RD	LYNCHBURG	24501	37.4415, -79.0886



Appendix G: Critical Facilities

County	Facility Type	Facility	Address/Location	City/Place	ZIP Code	Coordinates
Lynchburg	Special Population Facility - Nursing Home	SUMMIT HEALTH AND REHABILITATION CENTER	219 RIVERVIEW RD	LYNCHBURG	24502	37.4366, -79.1240
Lynchburg	Special Populations Facility - Detention Facility	LYNCHBURG REGIONAL JUVENILE DETENTION CENTER	575 UNION HILL RD	LYNCHBURG	24501	37.5343, -79.0994
Lynchburg	Special Populations Facility - Detention Facility	LYNCHBURG ADULT DETENTION CENTER	1981 LOWESVILLE RD	LYNCHBURG	24504	37.3520, -78.9093
Lynchburg	Transportation Hub	KEMPER STREET STATION	825 KEMPER ST	LYNCHBURG	24501	37.1407, -79.6108
Lynchburg	Wastewater Treatment Plant	LYNCHBURG CITY SEWAGE TREATMENT	2301 CONCORD TPKE	LYNCHBURG	24504	37.3976, -79.2588
Lynchburg	Water Storage Facility	GROUND STORAGE TANK, 2,000,000 GALLON	40 COUNTY AIRPORT RD	LYNCHBURG	24505	37.4205, -79.3045
Lynchburg	Water Storage Facility	GROUND STORAGE TANK, 1,400,000 GALLON	125 MILL LANE RD	LYNCHBURG	24505	37.2786, -79.8101
Lynchburg	Water Storage Facility	RESERVOIR 10,500,000 GALLON	207 FOX HOLLOW RD	LYNCHBURG	24505	37.1271, -79.6431
Lynchburg	Water Storage Facility	GROUND STORAGE TANK, 4,500,000 GALLON	3770 CANDLERS MOUNTAIN RD	LYNCHBURG	24505	37.0626, -79.5470
Lynchburg	Water Storage Facility	CANDLERS MOUNTAIN GROUNDS STORAGE TANK, 1,000,000	1221 NARROWS LN	LYNCHBURG	24505	37.3779, -79.5584
Lynchburg	Water Storage Facility	FORT AVENUE STORAGE TANK #1, 2,000,000	1562 CAPEWOOD DR	LYNCHBURG	24505	37.3091, -79.3423
Lynchburg	Water Storage Facility	STORAGE TANK #2, 500,000 GALLONS	1830 RADFORD CHURCH RD	LYNCHBURG	24505	37.3246, -79.5201



Appendix H: Hazard Events

Appendix H: Hazard Events

Hazard events in the news report

Flooding, 2018

Lynchburg

Sources:

- <https://www.accuweather.com/en/weather-news/breaking-potential-college-lake-dam-failure-spurs-evacuations-in-lynchburg-virginia/70005672>
- <https://www.bbc.com/news/world-us-canada-45054961>

Tornado, 2018

(Counties of Amherst, Campbell, and Bedford, and City of Lynchburg)

A tornado struck Lynchburg and the counties of Amherst and Campbell on April 15, 2018. The line of storms brought heavy rain, some hail, and violent wind gusts causing damage to property and infrastructure (Williamson, 2018). The tornado first touched down in northwest Campbell County causing damage to roofs and trees. According to a preliminary report by the National Weather Services in Blacksburg, the tornado was rated EF2¹³¹ and it had an estimated wind speed of 130 mph, a path length of 20.4 miles, and a maximum path width of 600 yards (The News and Advance, 2018). Six people in Amherst and two in Lynchburg suffered injuries and no fatalities were reported (Faulconer, 2018). According to AEP, 1657 customers in Amherst County, 1981 in Campbell County, and 10177 customers in Lynchburg were affected by the power outage (Williamson, 2018). The tornado uprooted big mature trees and snapped telephone poles damaging the nearby structures.

¹³¹ EF - Enhanced Fujita scale, which classifies tornadoes in six categories of strength ranging from EF-0 at the weakest to EF-5 at the strongest. EF2 - strong tornado with a maximum wind speeds of 111-135 mph.



Appendix H: Hazard Events

A mobile home park in Lynchburg was damaged by the tornado, with some minor damage to roofs of other houses in the area (National Weather Service Blacksburg). Roakes, Public Safety Director of Amherst County reported, 'A total of 146 homes in Amherst County were identified as having tornado-related damage, with 21 beyond repair'. The most severe damage was centered around the Elon area. Initial reports estimated the structural damage in Amherst County at \$3.685 million (The News and Advance, 2018). These numbers are expected to rise as the inspections continue. In Campbell County, around 15 to 20 businesses and a handful of homes were reported as damaged (Seidel, 2018).

Debris scattered after the tornado



[Photo by Lindsey Jenkins](#)

House located on Silver Springs Drive overturned by the tornado



[Photo by Lathan Goumas](#)

References

1. The News and Advance. April 17, 2018. Update: Number of structures damaged by tornado climbs retrieved from http://www.newsadvance.com/news/local/update-number-of-structures-damaged-by-tornado-climbs/article_c67fda02-4224-11e8-acc2-5b9d81c52993.html
2. Williamson, Jeff. 2018. Thousands without power after severe weather hits region. 10 News retrieved from <https://www.wsls.com/news/virginia/lynchburg/more-than-19000-without-power-after-severe-weather-hits-region>
3. U.S. National Weather Service Blacksburg, VA
<https://www.facebook.com/NWSBlacksburg/posts/1749285475130381>
4. Faulconer, Justin. April 16, 2018. Severe storm damage in Lynchburg area; weather service calls storm 'tornadic'. Richmond Times-Dispatch. retrieved from http://www.richmond.com/weather/severe-storm-damage-in-lynchburg-area-weather-service-calls-storm/article_6ddadff8-d25d-55e9-81fc-5a679dde7419.html
5. Seidel, David. April 15, 2018. Severe Storms, Tornadoes Cause Damage; Touchdown Confirmed in Lynchburg area, Danville, Craig County. retrieved from <http://wvtf.org/post/severe-storms-tornadoes-cause-damage-touchdown-confirmed-lynchburg-area-danville-craig-county>



Appendix H: Hazard Events

Tornado, 2016

(Appomattox County)

In February, 2016, Evergreen Community in Appomattox County, was struck by an EF3 ¹³² tornado and it had a wind speed of 165 mph. The tornado resulted in death of one person and seven injuries, and left more than 40 families homeless. It had a path length of 13 miles and a width of 400 yards starting from southeast of Appomattox and ending west of the Holiday Lake State Park (Monfort, 2016). Evergreen and Red House communities of Appomattox were severely affected by the tornado (Wise, 2016). Evergreen neighborhood was shattered into pieces and was left with smashed cars, destroyed belongings, and some building foundations without floors (Monfort, 2016).

The tornado damaged buildings and downed trees in some parts of the County. Appomattox County Officials stated, at least 100 homes in the area were affected of which 20 were completely destroyed by the tornado. Several residents of the county were affected by power outages. Additionally, phone lines were down in some areas which affected the emergency communication (Monfort, 2016). Two temporary shelters were set up for the people whose houses were damaged by the storm.

[House damaged in the Appomattox County tornado](#)

[Tornado damage along Richmond County Highway in Appomattox County](#)



Photos by Jill Nance

References

1. Monfort, Ashley. 2016. Tornado that hit Appomattox was EF-3 with winds up to 165 MPH. retrieved from <http://www.nbc12.com/story/31315571/tornado-that-hit-appomattox-was-ef-3-with-winds-up-to-165-mph>
2. Wise, Scott. February 26, 2016. Drone footage captures heartbreaking images over tornado damage. Retrieved from <http://wtvr.com/2016/02/26/appomattox-drone-footage/>

¹³² EF3 - A category defined as having wind speed of up to 165 mph



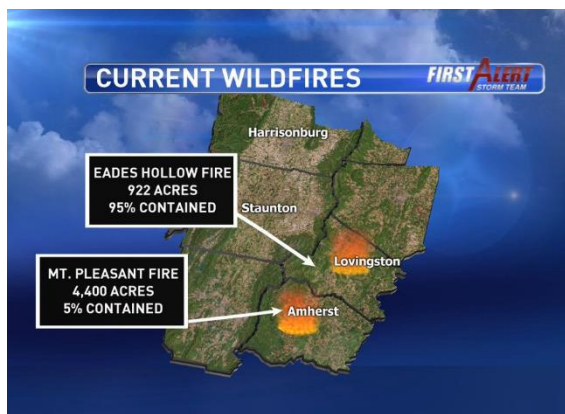
Appendix H: Hazard Events

Wildfire, 2016

(Amherst County)

Counties of Amherst and Campbell were impacted by a wildfire called the Mt. Pleasant Fire in November, 2016. The fire started near the George Washington National Forest and spread to private land in the Mount Pleasant area (Walsh, 2016). The forest fire in Amherst County continued for about a week and burned more than 11,000 acres, approximately 12 miles northwest of the town of Amherst (ABC, 2016). According to the fire officials, strong winds and low humidity contributed to the rapid spread of the fire in the region. No injuries and damage to houses was reported. Heavy smoke was reported in the surrounding areas due to southerly winds gusting over the valley.

[Location of November, 2016 wildfires in Central Virginia](#)



Posted by Aubrey Urbanowicz on Twitter

[Smoke rises from the forest fire in George Washington National Forest,](#)



Photo by Lathan Goumas

Following the event, Mount Pleasant National Scenic Area and several roads in the region were closed to the public until the fire was contained completely.

References

1. Tyree, Elizabeth., Ann, Ashley. November 22, 2016. Amherst County wildfire grows to 4,800 acres, national teams brought in to help. retrieved from <http://wset.com/news/local/amherst-county-wildfire-grows-to-2700-acres-national-teams-brought-in-to-help>
2. ABC. November 29, 2016. Mount Pleasant fire in Amherst County now 95 percent contained. retrieved from <http://www.whsv.com/content/news/Mount-Pleasant-fire-in-Amherst-County-now-95-percent-contained-403602666.html>



Appendix H: Hazard Events

3. Walsh, Toshi. November 26, 2016. Amherst County wildfire moves to 11,000 acres; almost half contained, officials say. Richmond Times - Dispatch. retrieved from http://www.richmond.com/news/virginia/amherst-county-wildfire-moves-to-acres-almost-half-contained-officials/article_3de59779-ae48-54a9-97bd-53950e59aed5.html



Appendix H: Hazard Events

Derailment of Train carrying Crude Oil, 2014 (Lynchburg)

In May of 2014, a crude oil carrying train in route from Chicago to Virginia derailed in Lynchburg sending three tankers rushing into the James River (Nunez, 2014). One of the tumbled tankers ruptured spilling almost 30,000 gallons of crude oil that either burned or washed away further into the river (Martz, 2016). The accident caused approximately \$ 1.2 million in damage alone, not including environmental remediation (NTSB). The incident did not cause any deaths or injuries and no damage to nearby buildings was reported (Dave, 2014). There were no reports of environmental impacts beyond Lynchburg (Springston, 2014).

Three CSX tankers sink in the James River



[Photo by Autumn Parry](#)

Crude Oil carrying train derailed in Lynchburg



[Photo by Mark Mellette](#)

The fire and spill after the derailment prompted immediate evacuations in six blocks along the riverfront, affecting 350 residents and 20 businesses in the downtown district (The News and Advance). At the spill site, remaining oil which was not burned was soaked from the river using various absorbent devices (Roanoke Times). Additionally, people in the region were advised by the state health officials to avoid swimming or paddling in the river (Roanoke Times).

References

1. Nunez, Christina. May 2 2014. Oil Train Derails in Lynchburg, Virginia. National Geographic. retrieved from <https://news.nationalgeographic.com/news/energy/2014/04/140430-oil-train-derails-in-lynchburg-virginia/>
2. Martz, Michael. March 2, 2016. Report: Lynchburg oil train derailment could have been prevented. The News and Advance. retrieved from http://www.newsadvance.com/work_it_lynchburg/news/report-lynchburg-oil-train-derailment-could-have-been-prevented/article_b81c3cfa-e095-11e5-8d3a-4323733baf51.html



Appendix H: Hazard Events

3. NTSB. National Transportation Safety Board Railroad Accident Brief. retrieved from <https://www.nts.gov/investigations/AccidentReports/Reports/RAB1601.pdf>
4. Dave, Paresh. April 30, 2014. Oil tanker train derails in Lynchburg, Va., triggering fire and spill. Los Angeles Times. retrieved from <http://www.latimes.com/nation/nationnow/la-na-nn-lynchburg-virginia-train-derailment-20140430-story.html>
5. Springston, Rex. May 7, 2014. Crude oil spilled from train may be in James River mud. Richmond Times-Dispatch. Retrieved from http://www.roanoke.com/news/crude-oil-spilled-from-train-may-be-in-james-river/article_141d2a48-d65a-11e3-ad4f-001a4bcf6878.html



Appendix H: Hazard Events

Rain Storm, 2013

(Lynchburg, Campbell County)

The July 11, 2013 rainstorm in Lynchburg resulted in the closure of several key roads (Parts of Sussex Street, Campbell Avenue, Florida Avenue, and Greenwood Drive). Reports stated that after the rainstorm, the total amount of rainfall in Lynchburg for the year 2013 at that point was more as compared to 2012.

The Concord Area of Campbell County received about 3 inches of rain and was hard hit by the storm. This affected the traffic in the area as water gushed out of parking lots onto the roads and there was limited visibility. The rainfall overwhelmed the city's pipes and there were 8 to 10 incidents of water driving sewage into people's basements. Additionally, there were a dozen or more instances of manhole covers popping open and sewage water overflowing because of the water pressure.

Sandusky Drive near Oakdale Drive in Lynchburg flooded
after the storm



References

1. Pounds, Jessie., Mohrmann, Barrett. July 11, 2013. Streets, basements flood in heavy rains in Lynchburg. The News and Advance. retrieved from http://www.newsadvance.com/news/local/streets-basements-flood-in-heavy-rains-in-lynchburg/article_2804fdb8-ea62-11e2-a5b2-001a4bcf6878.html



Appendix H: Hazard Events

Derecho¹³³, 2012

Severe Storms and Straight Line winds, 2012 June (4072) - Amherst, Campbell, Appomattox, Bedford
(FEMA Disaster Declarations)

The city of Lynchburg and surrounding regions were affected by a highly destructive storm known as 'Derecho' on June 29, 2012 (The News and Advance, 2018). The storm had a wind speed of 75 mph and it caused one of the largest power outages in Appalachian Power's history (Stuart, 2012). Approximately 70,000 customers in the Lynchburg region lost electricity (The News and Advance, 2018).

The public sewage treatment station in Lynchburg also lost electricity and was powerless for 24 hours. As a result of this, 2.5 million gallons of untreated wastewater was dumped into the James River (Springston, 2012). Additionally, millions more gallons of partially treated wastewater entered the river before the treatment plant became fully functional (Source). The Lynchburg plant did not have any backup generators and generally relied on nearby sources in case of a power outage (Springston, 2012). The City of Lynchburg had not planned for a region-wide event where multiple sources of electricity would fail simultaneously.

Damaged power poles, broken power lines, fallen trees affected many homes and businesses in the region. According to FEMA, the estimated damage of the storm was \$5.3 million (ABC 13, 2012). City Manager stated that a significant portion of the cost was from immediate clean-up.

Fallen tree and damaged power lines on Langhorne Ave Link Road home damaged by a huge Oak tree



Source: Photo by Parker Michels-Boyce/The News & Advance

¹³³ A derecho forms when the winds from several different thunderstorms join forces to produce one large gust of wind.



Appendix H: Hazard Events

Following the event many cooling shelters were opened in Lynchburg and the surrounding counties which provided a relief to the people affected by the outage and the heat wave accompanied by the storm (The news and Advance).

References

1. The News and Advance. March 2, 2018. From the archives: Derecho 2012. retrieved from http://www.newsadvance.com/news/local/from-the-archives-derecho/collection_3da0e42c-1e61-11e5-95c6-a76ecaba2d74.html#1
2. ABC 13. September 11th 2012. Derecho Costs Lynchburg \$5.3 Million. retrieved from <http://wset.com/archive/derecho-costs-lynchburg-53-million>
3. Springston, Rex. July 4, 2012. Partially treated sewage released in the James River at Lynchburg. Richmond Times - Dispatch. retrieved from http://www.richmond.com/news/partially-treated-sewage-released-in-the-james-river-at-lynchburg/article_04c5c396-281d-57c2-956f-cd4012107578.html
4. Stuart, Courteney. July 3, 2012. Derecho dump: Lynchburg's raw sewage soils the James. The Hook. retrieved from <http://www.readthehook.com/104461/derecho-dumping-lynchburg-sewage-hits-james>



Appendix H: Hazard Events

Other Incidents

Severe Winter Storm, 2015 February (4211)

Campbell, Lynchburg, Bedford County

In February, 2015, Lynchburg's temperature dropped to -11 degrees, a new, all time low. Around 6000 customers in Lynchburg, mostly in Appomattox County were without power for some time after the storm. Low temperatures following the storm shattered many water pipes. Some of the streets were covered in ice and heavy packed snow which slowed the traffic.



References

http://www.newsadvance.com/news/local/lynchburg-cold-shatters-all-time-record-low/article_dd59d180-b904-11e4-ae67-7fb2f1cf7d4e.html

EF0 tornado, 2017

Bedford County

According to the National Weather Service, a strong EF0 tornado touched down in Bedford County in April, 2017. The tornado traveled 0.66 miles and had a maximum path width of 100 yards and wind speed of 105 mph. It uprooted some trees in the area and caused minor structural damage to some houses.

1. <http://wset.com/news/local/nws-confirms-ef-1-tornado-hit-bedford-co>
2. <https://www.wsls.com/weather/tornado-touched-down-in-bedford-county-early-friday-morning>
3. <http://www.wdbj7.com/content/news/National-Weather-Service-EF-0-tornado-touched-down-in-Bedford-421505524.html>



Appendix H: Hazard Events

Flash Floods and Mudslides, 2015

(Lynchburg)

Heavy rains in September 2015 caused minor flooding, landslides, and downed trees in Lynchburg (Cioffi, 2015). A number of streets (Florida and Campbell Avenue) were blocked after heavy flooding (Abdi, 2015)

1. Cioffi, Chris., Walsh, Tobi. September 29, 2015. Flash flood watch remains in effect as rain soaks Lynchburg area, causing minor flooding and mudslides. The News and Advance. retrieved from http://www.newsadvance.com/news/local/flash-flood-watch-remains-in-effect-as-rain-soaks-lynchburg/article_5edbee8a-6690-11e5-b378-cfb8760985fb.html
2. Abdi, Mona. September 29, 2015. Heavy Flooding Forces Crews to Close Down streets in Lynchburg. retrieved from <http://wset.com/news/local/heavy-flooding-forces-crews-to-close-down-streets-in-lynchburg>

Hazmat Spill, 2017

(Tri Tech lab, Lynchburg)

A hazmat incident involving an Isopropyl alcohol was reported in February, 2017 in Lynchburg.

1. Ann Ashley. February 8, 2017. Emergency crews responding to hazard material incident at Tri Tech Lab. retrieved from <http://wset.com/news/local/emergency-crews-responding-to-hazard-material-incident-at-tri-tech-lab>

Flooding, 2017

Bedford County

One of the connecting roads washed away because of heavy rains in September, 2017.

1. <http://www.wdbj7.com/content/news/Bedford-County-families-access-road-still-washed-out-from-September-flooding-409441915.html>
2. <http://www.wdbj7.com/content/news/Water-flooding-into-roadway-in-Bedford-County-482981431.html>



Appendix H: Hazard Events

Droughts

Drought event 1998-2019

ZONE	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
CAMPBELL	10/1/1998	400000	
APPOMATTOX	10/1/1998	300000	
BEDFORD	10/1/1998	400000	
AMHERST	10/1/1998	300000	
APPOMATTOX	11/1/1998	0	
CAMPBELL/ LYNCHBURG	11/1/1998	40000	
BEDFORD/ BEDFORD	11/1/1998	0	
AMHERST	11/1/1998	0	
CAMPBELL	6/1/1999	0	
AMHERST	6/1/1999	0	
BEDFORD	6/1/1999	0	
APPOMATTOX	6/1/1999	0	
APPOMATTOX	7/1/1999	0	
AMHERST	7/1/1999	0	
BEDFORD	7/1/1999	0	
CAMPBELL	7/1/1999	0	
CAMPBELL/ LYNCHBURG	8/1/1999	0	
APPOMATTOX	8/1/1999	0	
BEDFORD/	8/1/1999	0	



Appendix H: Hazard Events

ZONE	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
BEDFORD			
AMHERST	8/1/1999	0	
CAMPBELL	9/1/1999	0	
APPOMATTOX	9/1/1999	0	
BEDFORD	9/1/1999	0	
AMHERST	9/1/1999	0	
BEDFORD	9/1/2007	4000000	The southern tip of Bedford county reached D2 severe drought. Hay, corn and soy production was down 30 to 40 percent.
CAMPBELL	9/1/2007	8000000	Hay, grain, soy and tobacco production was down forty to fifty percent due to the drought. The southwest portion of Campbell county had the greatest losses.
CAMPBELL	10/1/2007	0	The county began the month under a Severe (D2) Drought. This level of severity continued until October 23rd when it was increased to an Extreme (D3) Drought. This level of severity continued until October 30th when it was downgraded to a Moderate (D1) Drought.
BEDFORD	10/1/2007	0	The county began the month in the Severe (D2) Category of drought. It maintained this level of severity until October 30th when the drought category was downgraded to the Abnormally Dry (D0) Category. Voluntary water restrictions were in place for Bedford County for most of the month.
AMHERST	10/2/2007	0	Drought conditions increased into the Severe (D2) Category on October 2nd and remained at that level of severity through October 30th before dropping into the Abnormally Dry (D0) Category. Apples were of poor size and there was no second hay planting. Mandatory water



Appendix H: Hazard Events

ZONE	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
			restrictions were in place for Amherst County for most of the month.
APPOMATTOX	10/2/2007	0	The drought severity increased to the Severe (D2) Category on October 2nd. It remained at that intensity through October 23rd when it was upgraded to the Extreme (D3) Category. On October 30th, the intensity was downgraded to Abnormally Dry (D0) Category.
APPOMATTOX	1/29/2008	0	A Moderate (D2) drought existed over the eastern part of the county.
CAMPBELL	1/29/2008	0	A Moderate (D2) drought existed over the eastern part of the county.
APPOMATTOX	2/1/2008	0	Severe drought conditions continued for the entire month over the eastern portion of the county.
CAMPBELL	2/1/2008	0	Severe drought conditions continued for the entire month over the southeastern portion of the county.
CAMPBELL	3/1/2008	0	Severe (D2)drought status across southeastern portions of Campbell county improved to moderate (D1) drought and abnormally dry (D0) status.
APPOMATTOX	3/1/2008	0	Severe (D2)drought status across eastern portions of Appomattox county improved to moderate (D1) drought status.
BEDFORD	8/19/2008	0	Severe drought conditions returned to the southern one third of the county for the latter half of the month.
CAMPBELL	8/19/2008	0	Severe drought conditions returned to the county for the latter half of the month.
APPOMATTOX	8/19/2008	0	Severe drought conditions returned to most of the county for the latter half of the month.



Appendix H: Hazard Events

ZONE	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
BEDFORD	10/1/2019	9000000	Severe drought (D2) was depicted across western Bedford County on the U.S. Drought Monitor from October 1 to October 22nd. An extremely dry and very warm September led to the worsening conditions in the county. The NWS COOP site at Bedford (BDFV2) recorded only 0.31 inches of rain in September. This was the 3rd driest September on record at this station with around 85 years of sporadic data back to 1893. Impacts to corn, soybeans, hay and pasture amounted to around \$9 million.



Appendix H: Hazard Events

Earthquake

Significant Earthquakes in Virginia

<https://www.dmme.virginia.gov/DGMR/majorearthquakes.shtml>

February 2, 1774. The first documented earthquake in Virginia originated near Petersburg, where houses were displaced “considerably off their foundations.” The tremor rang church bells as far away as Winston-Salem, North Carolina. Estimated magnitude: 4.5.

December 11, 1811, January 23 and February 7, 1812. Effects from a series of monstrous earthquakes in New Madrid, Missouri, were felt strongly in Virginia, and details were reported in the Richmond and Norfolk newspapers.

August 27, 1833. An earthquake shook buildings and violently rattled windows in Lynchburg. It was described as “severe” in Charlottesville and fences shook near Louisa Courthouse. Near Richmond, two miners were killed in a panic caused by the tremor. Probably centered in Goochland County. Estimated magnitude: 4.5.

April 29, 1852. An earthquake centered in Grayson County or Wythe County threw down a chimney near Wytheville, shook off the tops of chimneys at Buckingham Courthouse, and shook houses in Staunton. This quake was felt over an area of approximately 175,000 square miles, including parts of Ohio, Pennsylvania and New York. Estimated magnitude: 4.9.

November 2, 1852. An earthquake that damaged chimneys at Buckingham Courthouse was also reported to be strong at Fredericksburg and Richmond. In Scottsville, every house was shaken, and water in the canal was “troubled” and boats tossed about. Estimated magnitude: 4.3.

December 22 and 23, 1875. This quake was centered west of Richmond, with the highest intensities at towns near the James River in Goochland and Powhatan Counties, and in Louisa County, and it was felt from Baltimore, Maryland, to Greensboro, North Carolina, and from the Atlantic westward to White Sulphur Springs, West Virginia. In Richmond, severe damage was sustained in the downtown business and residential areas adjacent to the James River or on islands in the river. Waves “suddenly rose several feet” at docks, causing boats to snap their moorings and drift downstream. Bricks fell from chimneys, plaster cracked, and windows shattered. The quake occurred just before midnight, and people “rushed into the streets in all sorts of clothing.” At Manakin, west of Richmond, shingles were shaken from a roof and many lamps and chimneys were broken. Several small aftershocks were reported through Jan. 2, 1876. Maximum Intensity: VII, estimated magnitude: 4.5.

September 1, 1886. Originating in Charleston, South Carolina, felt across the extent of the eastern seaboard, an area of over two million square miles, this was the most damaging seismic event in the U.S. prior to the 1906 San Francisco earthquake, an estimated magnitude of 7.3 on the Richter scale. In Charleston, over sixty people died, and structural damage occurred as far away as Richmond and Atlanta, where prisoners rioted in the penitentiary and the militia had to be called out to restore order. Throughout Virginia, chimneys were thrown down, windows shattered, and plaster cracked.



Appendix H: Hazard Events

May 3, 1897. Centered at Radford, where a few chimneys were wrecked and plaster fell from walls, and chimneys were damaged at nearby Pulaski and Roanoke. Felt in most of southwest Virginia and as far south as Winston-Salem, North Carolina. Estimated magnitude 4.3. This was a prelude to The Big One.

May 31, 1897. This earthquake was the most intense and widespread in Virginia in historical times, with Modified Mercalli Intensity of VIII. Felt over an area of 280,000 square miles from Georgia to Pennsylvania and from the Atlantic Coast westward to Indiana and Kentucky, the area of maximum ground motion extended over an area from Lynchburg west to Bluefield, West Virginia, south to Bristol, Tennessee. The shock was felt most severely near Pearisburg in Giles County, where the ground rolled in an undulating motion, water in springs became muddy, and some springs ceased to flow, and a train was derailed. Walls of old brick houses were cracked and many chimneys were thrown down or badly damaged. Many chimneys also were shaken down or damaged at Bedford, Pulaski, Radford, Roanoke, and Bristol, Christiansburg, Dublin, Floyd, Lexington, Lynchburg, Rocky Mount, Salem, Tazewell, and Wytheville in Virginia, as well as Charlotte, Oxford, Raleigh, and Winston, North Carolina, Knoxville, Tennessee, and Bluefield, West Virginia. Aftershocks continued through June 6, 1897. Estimated magnitude: 5.8-5.9. This was the second largest earthquake in the eastern United States in the last 200 years.

February 5, 1898. Bricks were thrown from chimneys, furniture was shifted in a few houses, and residents rushed into the streets of Pulaski. Felt throughout southwest Virginia and south to Raleigh, North Carolina.

February 11, 1907. Near Arvon in Buckingham County, chimneys were cracked and a window was broken at a store at Buckingham. A “terrific” shock sent people rushing outdoors at Arvon and displaced furniture. Felt strongly from Powhatan to Albemarle County.

April 9 and 10, 1918. At Luray, in Page County, windows were broken and plaster was cracked severely. Ceilings of houses were cracked badly at Edinburg; windows were broken at Harrisonburg and Staunton, and Washington, D.C. (at Georgetown University). In addition, a new spring formed in Page County near Hamburg, almost in the middle of a road. A minor aftershock was reported in the area about five hours later. Also felt in Maryland, Pennsylvania, and West Virginia.

September 5 and 6, 1919. This earthquake affected mainly towns in Warren and Rappahannock Counties. At Arco, in the Blue Ridge Mountains south of Front Royal, chimneys were damaged, plaster fell from walls, and springs and streams were muddied. Reports from the adjacent northern part of Rappahannock County state that similar shocks were felt and that streams were “rendered turbid.” Also felt in parts of Maryland and West Virginia. Several aftershocks occurred.

December 25 and 26, 1929. A moderate tremor at Charlottesville shook bricks from chimneys in some places. Also felt in other parts of Albemarle County.

April 23, 1959. This earthquake was strongest in Giles County, at Eggleston and Pembroke. Residents there reported several damaged chimneys and articles shaken from shelves and walls. One chimney toppled at the Norfolk and Western Station in Eggleston. Also felt in West Virginia. Magnitude 3.8.

November 20, 1969. Centered along the State line near Elgood, West Virginia, and Rich Creek, Virginia, locally many windows including display windows were broken and plaster cracked. Magnitude 4.6.



Appendix H: Hazard Events

November 11, 1975. Windows were broken in the Blacksburg area and plaster was cracked at Poplar Hill (south of Pearisburg, in Giles County). Also felt in Pulaski County.

September 13, 1976. Centered in Carroll County, bricks fell from chimneys and pictures fell from walls at Mount Airy, North Carolina. At the nearby town of Toast, North Carolina, cracks formed in masonry and plaster. The earthquake was observed in many towns in North Carolina and Virginia and in a few towns in South Carolina and West Virginia. Carroll County is one of the most persistent areas of activity in Virginia; since 1976, five small felt earthquakes have occurred near Hillsville.

In 1981 a sequence of three earthquakes with magnitudes of 3.4, 3.2, and 2.9 occurred near Scottsville within an eight-minute period.

August 17, 1984. An earthquake centered near Cunningham in Fluvanna County had a magnitude of 4.0 and a maximum intensity of V and was felt over 12,000 square miles.

In the winter of 1986-1987, a series of eleven small magnitude (1.5-2.2) shallow earthquakes were strongly felt (maximum intensity V) in Richmond.

December 9, 2003. South of Goochland along the James River, about thirty miles west of Richmond, this was the largest earthquake recorded in Virginia since the widespread use of modern seismic equipment in the 1970's. It was a shallow earthquake, three miles deep, probably the result of a rupture of the Lakeside Fault, with a magnitude of 4.5 and a maximum intensity of VI, and it was felt strongly over most of the State. Although little or no structural damage occurred during the event, the U.S. Geological Survey reported that the trembles were felt in parts of North Carolina and Maryland. Shaking was such that State government buildings were evacuated and inspected for damage. It had been preceded May 5, 2003 by a 3.8 event whose epicenter was just a few kilometers away.

May 6th, 2008. A minor earthquake with an estimated magnitude of 2.0 occurred near Annandale, Virginia. Felt reports were primary received from people in Fairfax County, Virginia; the District of Columbia; and Montgomery County, Maryland.

August 23rd, 2011. Virginia and much of the East Coast experienced a widely-felt earthquake at 1:51 p.m. eastern daylight time on Tuesday, August 23, 2011. According to the U.S. Geological Survey, the epicenter of the quake was located near Cuckoo, in Louisa County. With a magnitude of 5.8, this is the largest Virginia earthquake recorded by seismometers. 26 aftershocks have been reported by the USGS and the area is currently being monitored by geophysicists from several leading science institutions.



Appendix H: Hazard Events

Extreme temperatures: cold / wind chill

Cold/Wind Chill event 1996 - 2019

ZONE	BEGIN DATE	CROP DAMAGE (\$)	DESCRIPTION
CAMPBELL	2/3/1996	0	
AMHERST	2/3/1996	0	
BEDFORD	2/3/1996	0	
APPOMATTOX	2/3/1996	0	
CAMPBELL	3/8/1996	12000	
BEDFORD	3/8/1996	12000	
APPOMATTOX	3/8/1996	10000	
AMHERST	3/8/1996	5000	
AMHERST	4/9/1997	200000	Temperatures in the 20s during the morning hours on the 9th damaged apple, peach, and grape crops in Amherst County.
AMHERST	4/10/1997	200000	Temperatures in the 20s during the morning hours on the 10th damaged apple, peach, and grape crops in Amherst County.
AMHERST	4/15/1997	50000	Temperatures in the 20s during the morning hours on the 15th damaged apple, peach, and grape crops in Amherst County.
AMHERST	4/16/1997	50000	Temperatures in the 20s during the morning hours on the 16th damaged apple, peach, and grape crops in Amherst County.
BEDFORD	1/7/2014	0	Wind chill temperatures were observed in the -20F to -22F range at several locations throughout the county during the early morning hours of January 7th, 2014.



Appendix H: Hazard Events

ZONE	BEGIN DATE	CROP DAMAGE (\$)	DESCRIPTION
CENTRAL VIRGINIA BLUE RIDGE	2/14/2015	0	Combination of winds and temperatures measured at multiple AWOS resulted in wind chills of -25 degrees.
CENTRAL VIRGINIA BLUE RIDGE	12/15/2016	0	Wind chill values between -10 and -20 degrees were estimated based on observations nearby.
CENTRAL VIRGINIA BLUE RIDGE	3/14/2017	0	Wind chill values were estimated to be between 10 and 15 degrees below zero based on observations nearby.
CENTRAL VIRGINIA BLUE RIDGE	12/12/2017	0	Wind chills were estimated to be between minus 5 and minus 15 degrees based on observations nearby.
CENTRAL VIRGINIA BLUE RIDGE	12/27/2017	0	Wind chills were estimated to be between -5 and -15 degrees based on observations nearby.
CENTRAL VIRGINIA BLUE RIDGE	1/1/2018	0	Wind chills were estimated to be between -10 and -25 based on observations nearby.
CENTRAL VIRGINIA BLUE RIDGE	1/4/2018	0	Wind chill values were around -10 to -25 degrees.
CENTRAL VIRGINIA BLUE RIDGE	1/5/2018	0	Wind chills were around -20 to -30 degrees.
CENTRAL VIRGINIA BLUE RIDGE	1/21/2019	0	The combination of cold temperatures and strong winds produced wind chills as low as -25 degrees.
CENTRAL VIRGINIA BLUE RIDGE	1/30/2019	0	The combination of cold temperatures and strong winds produced wind chills as low as -25 degrees.
CENTRAL VIRGINIA BLUE RIDGE	3/6/2019	0	The combination of cold temperatures and strong winds produced wind chills as low as -10 degrees.



Appendix H: Hazard Events

Extreme temperatures: excessive heat

Excessive heat event in CVPDC in 2012

ZONE	BEGIN DATE	CROP DAMAGE (\$)	DESCRIPTION
BEDFORD	7/1/2012	0	<p>A 57-year old man died of a heart attack that may have been related to the heat. No autopsy was performed so no conclusive evidence exists as to the cause of death. This was the 4th consecutive day of record or near-record heat in the county.</p> <p>A ridge of high pressure dominated the central and eastern U.S. the last few days of June and into the 1st of July. Records too numerous to mention were broken and in some cases, smashed throughout the eastern half of the nation, many of them all-time records not simply date records. See June Storm Data for the June details in the Blacksburg/Roanoke CWA. July 1st was the last day of the record-setting heat wave that began around the 27th of June. Records from climate observing sites on July 1st showed 100F at Danville (tied highest for date, records since 1948); 97F at Roanoke (tied 3rd, records since 1912); 97F in Lynchburg (tied 2nd, records since 1893), 90F at Blacksburg (tied 3rd, records since 1952) and 90F at Bluefield (1st, records since 1959).</p>



Appendix H: Hazard Events

Flooding

Flash flood events 2010 - 2019

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	EVENT NARRATIVE
BEDFORD	1/25/2010	10000	Heavy rain in steep terrain help to cause a mudslide that covered the intersection of Route 221 and Brookhill Road. Damage values are estimated.
CAMPBELL	1/25/2010	10000	Flash flooding caused Stage Road to be impassable. Damage values are estimated.
CAMPBELL	1/25/2010	50000	Flash flood waters caused Rocky Road and Wisecarver Road to be impassable. Damage values are estimated.
CAMPBELL	1/25/2010	10000	Flash flooding caused Route 678 to be impassable. Damage values are estimated.
BEDFORD	1/25/2010	10000	Heavy rain caused flash flooding on a stream and a bridge on Lipscomb Road was flooded. Damage values are estimated.
AMHERST	1/25/2010	5000	Heavy rain caused a stream to leave its bank and a flash flood flowed over Buffalo Springs Turnpike. The road was then closed. Damage values are estimated.
AMHERST	1/25/2010	20000	Heavy rain prompted flash flooding on Horsley Creek and the flowing water went across Wagon Trail Road. The road was closed. Damage values are estimated.
APPOMATTOX	1/25/2010	5000	Heavy rain prompted a flash flood to occur across Highway 460. Damage values are estimated.
APPOMATTOX	1/25/2010	5000	Heavy rains helped generate a mudslide east of Concord. Damage values are estimated.
AMHERST	1/25/2010	100000	Heavy rains caused a culvert to collapse on Mansion Way. Damage values are estimated.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	EVENT NARRATIVE
AMHERST	1/25/2010	100000	Flash flooding caused a portion of Turkey Mountain Road to wash out. Damage values are estimated.
AMHERST	5/28/2010	0	Flash flooding occurred along Woodson Road as heavy rain caused streams to leave their banks. Damage values are estimated.
BEDFORD	7/9/2010	0	Johns Creek was reported to have water briefly out of its banks and caused roads to be closed.
BEDFORD	8/5/2010	0	Nichols Road bridge was closed due to high water.
BEDFORD	8/5/2010	0	Flooding from an unnamed creek caused Union Church Road to be closed.
BEDFORD	8/5/2010	0	Nininger Creek flooded over Five Forks Road, which was closed.
BEDFORD	8/5/2010	0	Evington Road was closed due to flood waters flowing over the road.
BEDFORD	8/5/2010	0	Heavy rains caused Nolans Drive to become impassable due to high water.
APPOMATTOX	8/16/2010	0	Stonewall Creek was reported out of its banks. A retired NWS employee reported 3.78 inches of rain.
APPOMATTOX	8/16/2010	0	Water was reported to be flowing across a road from a nearby creek.
LYNCHBURG	8/24/2010	0	City police reported that Sandusky Drive was closed between Rhonda Road and Greenwood Drive due to rapidly flowing water well over 6 inches in depth. A later report said the water from Burton Creek reached 2 feet of depth in the parking lot of Sandusky Park.
BEDFORD	9/30/2010	10000	Bethel Church Road was closed due to flash flooding. Damage values are estimated.
BEDFORD	9/30/2010	10000	Flash flooding occurred along a tributary of the North



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	EVENT NARRATIVE
			Fork of Goose Creek and prompted flooding of Crouch Road. Damage values are estimated.
BEDFORD	9/30/2010	10000	Flash flooding along the North Fork of Goose Creek prompted the flooding and closure of Beale Trail. Damage values are estimated.
BEDFORD	9/30/2010	100000	Flash flooding occurred along Stony Fork and waters washed out a portion of Route 608. Damage values are estimated.
BEDFORD	12/1/2010	10000	Flash flooding prompted the closure of Thaxton Mountain Road between Union Church Road and Rocky Ford Road. Damage values are estimated.
BEDFORD	12/1/2010	10000	Flash flooding prompted the closure of Foster Road between Quarles Road and Nester Road where it crosses Goose Creek. Damage values are estimated.
AMHERST	12/1/2010	10000	Flash flooding occurred along the Piney River. A four foot rise was observed in less than six hours with the river cresting at 6.32 feet. Flood stage is 6.00 feet. Damage values are estimated.
AMHERST	4/16/2011	0	Flooding was occurring along Buffalo Springs Turnpike.
BEDFORD	4/16/2011	0	Portions of Stewartsville Road from block 24 to 12300 was flooded. Also flooding was reported along Saunders Road.
BEDFORD	4/16/2011	0	Goose Creek was flooding Wilkerson Mill Road with water and debris in the roadway.
AMHERST	4/16/2011	5000	Heavy rains caused several creeks to flood over roadways. Franklin Creek flooded the Lexington Turnpike, Stonehouse Creek flooded Fancy Hill Road, Maple Run Creek flooded Flat Woods Road, Maple Run Creek flooded Maple Run Road and Woodson Road was flooded by the Piney River.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	EVENT NARRATIVE
CAMPBELL	4/16/2011	0	Heavy rains caused a creek to flood Collins Ferry Road.
BEDFORD	8/13/2011	0	Heavy rains of 3 to 5 inches in several hours caused road closures in several locations. The Bedford Cooperative observer had 4.77 inches ending at 8 AM on the 14th. Roads close due to flooding included Highway 43 from Fancy Farm Road north Peaks of Otter; the intersection of Forbes Mill road and Jopling Road; intersection of Woods Road and Peaks Road and the intersection of Glass Hill Road and Otterville Road.
APPOMATTOX	3/20/2012	0	The upper Falling River flooded a portion of Pumping Station Road.
APPOMATTOX	3/20/2012	0	The upper reaches of the Falling River was reported to be flooding a portion of Chilton Road.
APPOMATTOX	3/25/2012	0	Heavy rains caused small stream flooding with several roads closed in Appomattox County.
BEDFORD	5/14/2012	0	An unnamed stream came out of its banks and flooded Spinnaker Way and Harbour Trail, leaving behind debris on the roads. Over six inches of water was observed flowing over these roads. Numerous driveways and front lawns were flooded as well.
BEDFORD	1/30/2013	5000	A portion of Meadowlark Lane was washed out due to flash flooding.
AMHERST	5/7/2013	0	Heavy rain caused Maple Run Creek to overflow its banks and flood Flat Woods Road.
CAMPBELL	7/11/2013	0	Stage Road was reportedly flooded by Archer Creek after rainfall of 1.5 to 3 in several hours.
APPOMATTOX	7/11/2013	0	Heavy rainfall estimated at 1.5 to 3 on radar caused flooding on parts of Route 460 at Highway 24, closing the road.
LYNCHBURG	7/11/2013	0	Heavy rainfall across the City of Lynchburg produced



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	EVENT NARRATIVE
			pockets of urban and flash flooding in the city. Radar showed that up to 2 inches fell in less than an hour in most of the city but a report of 3.49 was received by local broadcast media. A creek near Lynchburg College flooded a road and at least six to seven other roads in the city were flooded including Sandusky Drive, Sussex Street, Florida Avenue, Greenwood Drive and McConville Road. Several basements were flooded and manhole covers blown off by the rapid runoff.
APPOMATTOX	7/20/2013	0	Little Wreck Island Creek was flooded and covered a bridge or road.
CAMPBELL	4/30/2014	0	The Campbell County 911 Center reported that Morris Church Road was flooded and closed approximately five miles west of Red House. This flooding appeared to be the result of Little Falling River or one of its tributaries overflowing their banks.
CAMPBELL	4/30/2014	0	The Campbell County 911 Center reported that Dog Creek Road was flooded and closed as a result of flood waters from Dog Creek just before it flows into the Roanoke River.
AMHERST	5/15/2014	0	Several inches of water was observed flowing over Gidsville Road.
CAMPBELL	6/20/2014	5000	Flash flooding resulted in the closure of US Route 29S. Damage values are estimated.
CAMPBELL	6/23/2016	0	Water was estimated to be 12 inches deep and flowing across Calohan Road (Route 685).
CAMPBELL	6/23/2016	0	Flash flooding due the heavy rainfall was reported along a portion of Timberlake Road near Forest. The nearby Lynchburg Airport ASOS (LYH) climate site reported 3.54 inches for June 23rd which was a new record for the date. The old record was 1.73 inches set in 1967. It was also the 2nd wettest June day on record at Lynchburg with data back to 1893.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	EVENT NARRATIVE
BEDFORD	8/21/2017	0	A tributary of the South Fork of Little Otter Creek overflowed and closed a portion of Liberty Street near West Federal Street and Jeter Street at West Washington Street. Some minor flooding also occurred near the intersection of 4th Street and Bedford Avenue closing the road for a period.
BEDFORD	8/21/2017	0	Up to two feet of standing water was observed along Route 460 westbound near the intersection with Hulls Street.
BEDFORD	5/17/2018	5000	Up to two feet of rapidly flowing water was over the intersection of Hazelwood Terrace and Beagle Club Road along with a small debris flow and small tree pushed into the roadway. Spotter reported 4.32 inches of rain in less than 4 hours at the time of the report. Turner Branch Road in the Blue Ridge area was washed out and closed and a motorist was rescued from the flood waters.
BEDFORD	5/17/2018	0	Water 1 to 2 feet in depth reported flowing across Goose Creek Valley Road.
CAMPBELL	5/17/2018	0	Water was reported covering portions of Route 501 between Rustburg and Gladys.
AMHERST	5/27/2018	0	Beck Creek Road and Tent Mountains Farm Road were flooded and closed. A rescue was conducted for one man in a home surrounded by rising flood waters.
AMHERST	5/27/2018	0	Beck Creek Road and Tent Mountain Farm Road were flooded and closed. A man was rescued from his home along Beck Creek Road as water was rising around the structure.
LYNCHBURG	6/9/2018	0	Flash flooding was reported at several locations around Lynchburg including Sussex Avenue, Wards Ferry Road, Twin Oaks Drive and Greenwood Drive which was flooded by overflow from Blackwater Creek.
LYNCHBURG	8/2/2018	18000000	Extreme rainfall of 4 to 6 inches in several hours



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	EVENT NARRATIVE
			produced widespread flash flooding in the City of Lynchburg. The first reports began around 515 PM local time (415 PM EST) and continued for several hours with numerous roads closed by water running over them, vehicles flooded, water rescues and several properties flooded or threatened. Several apartment complexes and nearby cars were flooded. The runoff into College Lake caused water to overflow the dam (which is also Lakeside Road) to a depth of at least 12 to 18 inches and into Blackwater Creek. The overtopping is considered a partial failure of the dam but a complete failure of the structure was possible. This resulted in a Flash Flood Warning for a dam failure and subsequent evacuation of about 120 homes in the downstream watershed of Blackwater Creek. According to local City officials flood damage exceeded \$18 million in roads, property and water control structure damages, the biggest to College Lake Dam.
CAMPBELL	8/2/2018	100000	Several reports of flash flooding from the Timberlake area of Campbell County. Sunburst Road was flooded and impassable with more than a foot of water over it. Three feet of was over Timberlake and Woodhaven Road with a vehicle trapped. Buffalo Creek was well out of its banks and flooding Route 460. A swift was rescue was reported in this area. In addition, water was observed flowing over the spillway of Timberlake Dam. In the aftermath up to eight roads in the county were reported with some type of structural damage. Two homes were also reported to have been damaged.
BEDFORD	8/2/2018	25000	There were several reports of roads washed out or overtopped in the Forest area including Spring Lake Road, Bethel Church Road, Terry Place and Goose Hollow Road.
CAMPBELL	9/1/2018	0	The Little Falling River overflowed Morris Church Road (Route 646) southwest of Red House. The road was closed by State Police.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	EVENT NARRATIVE
APPOMATTOX	9/1/2018	0	Rocks Church Road (SR 620) was closed by flooding near Suanee Creek Road.
CAMPBELL	9/22/2018	0	Riverbend Road in Altavista and Johnson Creek Road were flooded and closed.
BEDFORD	9/22/2018	25000	Water was reported flowing over Highway 122. A private bridge over the East Fork Beaverdam Creek was badly damaged from the flooded creek, shown in a video on local media.
CAMPBELL	10/11/2018	366000	Campbell County was included in a Presidential Major Disaster declaration due mainly to the severe flooding associated with Tropical Storm Michael. There were several reports of flash flooding on the afternoon of the 11th with roads closed and verified flood damages exceeded \$300 thousand.
LYNCHBURG	10/11/2018	20000	Heavy rains led to some flash flooding as to 2 to 3 inches fell in a short period. Lynchburg Airport ASOS (LYH) set a daily record rainfall for October 11th of 2.58 inches, with records back to 1893. The old record was 1.76 inches in 1990. Flooding was reported along a Ivy Creek with water flowing across Ivy Drive. City of Lynchburg officials activated the Emergency Action Plan for College Lake dam early Thursday as a result of the heavy rain but did not have to evacuate any residents or businesses downstream of the dam along Blackwater Creek. Several other roads were reported closed in Lynchburg including Greenwood Drive where it crosses Ivy Creek.
APPOMATTOX	10/11/2018	69000	Appomattox County was included in a Presidential Major Disaster declaration due mainly to the severe flooding associated with Tropical Storm Michael. Purdums Branch was several feet out of its banks and flooding apartments along Red House Road. In the town of Appomattox, a woman and boy were rescued after fast-moving water trapped the two in a creek behind their home on Church Street. A team of about 17 first responders with the Concord Appomattox Swiftwater



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	EVENT NARRATIVE
			Team responded to the rescue effort around 4:45 PM Local time. The two victims were quickly pulled from the waters without injury according to news reports.

Flood events 2010 - 2019

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
AMHERST	9/30/2010	10000	Small stream flooding occurred along Higginbottom Creek, and Higginbottom Road was flooded and closed because of the water. Damage values are estimated.
AMHERST	9/30/2010	10000	Flooding occurred along Maple Run, and Flatwoods Road was flooded and closed. Damage values are estimated.
AMHERST	9/30/2010	10000	Flooding occurred along Mill Creek and flooded and closed Buffalo Springs Turnpike. Damage values are estimated.
BEDFORD	3/6/2011	100000	Heavy rain produced flooding along Beagle Club Road at the Hardy Trailer Park. The water was one foot deep. Damage values are estimated.
BEDFORD	3/6/2011	0	Heavy rains prompted flooding along State Route 676, Crosscreek Road, rendering it impassable.
BEDFORD	3/6/2011	0	Heavy rain prompted a creek to leave its banks and flood Lankford Mill Road. The flood water rendered the road impassable.
BEDFORD	9/6/2011	0	A prolonged period of heavy rain, totaling around five inches, prompted Bellamy Creek to flood Red Hill Road.
BEDFORD	9/6/2011	0	A prolonged period of heavy rain, totaling around five to six inches, caused the Big Otter River to flood



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
			Lankford Mill Road. The flooding affected mainly pastureland adjacent to the river and flowed over a few roads. These roads included Mill Road, Peaks Road, and Lankford Mill Road. Damage values are estimated.
BEDFORD	9/6/2011	10000	Prolonged heavy rain, totaling three to four inches, flooded Bells Mill Road. Fallen trees, branches and mud completely blocked a small bridge on Bells Mill Road. Damage values are estimated.
BEDFORD	5/14/2012	0	Sheep Creek was observed spilling out of its banks and overflowing a low water bridge on Jay Bird Lane.
LYNCHBURG	6/6/2013	5000	Prolonged heavy rain produced flooding in a few locations, and debris collected by the waters prompted some street closures. Specifically, Greenwood Drive was closed due to flooding, and Campbell Avenue and Grace Streets were closed due to debris in the road. Damage values are estimated.
CAMPBELL	7/26/2016	0	High water closed Lynbrook Road at the intersection of Lawyers Road just south of Lynchburg Airport where the record daily rainfall occurred.
BEDFORD	9/30/2016	0	About one foot of water was reported over Beagle Club Road (Route 635) near Hardy Road.
CAMPBELL	5/25/2017	0	The USGS gauge at Brookneal (BROV2) crested at 24.46 feet (28400 cfs) during the evening of the 25th. Minor flood stage is 23 feet. This was the highest level since January 2010 at this location.
AMHERST	2/11/2018	0	Several roads were reported to be closed due to flooding in the county including Routes 648, 600, 624 and 604.
APPOMATTOX	2/11/2018	0	Several roads were reported closed due to flooding



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
			including Route 705, Route 666, Route 605.
CAMPBELL	5/19/2018	0	The Falling River near Naruna gauge crested on May 19th at 15.97 feet (Minor FS - 15 ft.). This was the highest stage at this gauging stations since July 3, 2003.
CAMPBELL	5/19/2018	0	The Roanoke (Staunton) River at Brookneal gauge crested at 24.19 feet (Minor FS - 23 ft.) around midday on the 19th.
AMHERST	12/28/2018	0	U.S. Route 60 was closed due to flooding at a bridge.
CAMPBELL	2/23/2019	0	The Roanoke River at Brookneal (BROV2) crested at 25.67 feet early on the 24th above the Minor flood stage of 23 feet. This was the highest stage at Brookneal since January 26, 2010 when the river reached 28.2 feet. Flooding was mainly in lowland fields and woods. According to USGS data however the peak discharge of 31500 cfs was only about a 2-year recurrence interval event (0.50 annual chance flood).



Appendix H: Hazard Events

Hailstorm

Hail event 2012-2019

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	MAGNITUDE	DESCRIPTION
CAMPBELL	2/24/2012	0	0.75	
BEDFORD	2/24/2012	0	0.88	
CAMPBELL	3/20/2012	0	0.88	
CAMPBELL	3/20/2012	0	1	
CAMPBELL	3/20/2012	0	1	
CAMPBELL	3/20/2012	0	0.75	
BEDFORD	3/20/2012	0	1	
BEDFORD	3/20/2012	0	0.88	
BEDFORD	3/24/2012	0	1	
BEDFORD	3/24/2012	0	1	
CAMPBELL	3/24/2012	750	1.75	The hail damaged siding, broke one window and several screens on a home.
CAMPBELL	3/24/2012	0	1	
CAMPBELL	3/24/2012	0	1.5	Hail lasted about 15 minutes.
APPOMATTOX	3/24/2012	0	1	
CAMPBELL	3/24/2012	0	0.88	



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	MAGNITUDE	DESCRIPTION
APPOMATTOX	3/24/2012	500	1	Gutters in a home were damaged.
APPOMATTOX	3/24/2012	0	1	
BEDFORD	5/2/2012	0	1	
BEDFORD	5/2/2012	0	1.75	
BEDFORD	5/2/2012	0	1	Quarter size hail was observed at the intersection of Routes 460 and 122.
BEDFORD	5/2/2012	0	1.25	
BEDFORD	5/2/2012	0	1	Dime to quarter size hail was observed at 1386 Kenmar Drive.
BEDFORD	5/3/2012	0	1.25	
AMHERST	5/22/2012	0	0.75	
AMHERST	5/22/2012	0	1	Quarter size hail was observed falling along Lowesville Road.
LYNCHBURG	5/22/2012	0	0.75	Dime to penny size hail was observed falling along Mayfield Drive.
BEDFORD	5/22/2012	0	1	Quarter size hail was observed falling along Highway 221 on the west side of the City of Lynchburg.
LYNCHBURG	5/22/2012	0	0.75	Penny size hail was observed falling along Lakeside Drive in the city of Lynchburg.
AMHERST	6/1/2012	0	2	Large hail ranged from one to two



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	MAGNITUDE	DESCRIPTION
				inches in diameter.
AMHERST	6/1/2012	0	1.75	Golfball size hail impacted roughly a one mile stretch of Gidsville Road.
AMHERST	6/1/2012	0	1.25	NSSL (National Severe Storms Laboratory) volunteers collected reports of half dollar size hail spread over a two mile swath in the Lowesville area.
AMHERST	6/1/2012	0	1.25	Half dollar hail was reported along Little Piney Road near Lowesville.
CAMPBELL	6/30/2012	0	0.75	
CAMPBELL	6/30/2012	0	0.88	Nickel size hail was reported at the intersection of English Tavern Road and Highway 29 South.
CAMPBELL	6/30/2012	0	1	Nickel to quarter size hail fell on Robinson Drive.
CAMPBELL	6/30/2012	0	1	Quarter size hail fell on Clarks Road.
BEDFORD	7/3/2012	0	1	
BEDFORD	7/3/2012	0	0.75	
BEDFORD	7/3/2012	0	1.5	
BEDFORD	7/3/2012	0	1	
APPOMATTOX	7/5/2012	0	1	



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	MAGNITUDE	DESCRIPTION
APPOMATTOX	7/9/2012	0	1	
AMHERST	6/13/2013	0	1	Quarter size hail covered the ground.
BEDFORD	6/13/2013	0	1	
BEDFORD	6/26/2013	0	0.75	
LYNCHBURG	5/27/2014	0	1	Quarter-size hail was observed on Wyndhurst Drive.
CAMPBELL	5/27/2014	0	0.75	
BEDFORD	5/28/2014	0	0.75	
CAMPBELL	6/11/2014	0	1	Quarter size hail fell on Conner Road.
BEDFORD	6/11/2014	0	1	Hail fell that ranged from dime to quarter size.
BEDFORD	6/16/2014	0	0.75	The report of penny size hail was relayed via Facebook.
BEDFORD	6/20/2014	0	1	
AMHERST	6/20/2014	0	0.88	
BEDFORD	7/3/2014	0	0.75	
AMHERST	7/3/2014	0	1	Hail to the size of quarters reported along Route 501.
BEDFORD	7/24/2014	0	0.88	
BEDFORD	4/8/2015	0	1	



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	MAGNITUDE	DESCRIPTION
CAMPBELL	4/8/2015	0	0.88	
AMHERST	5/11/2015	0	1	The public reported via Twitter quarter-sized hail approximately three miles west of Pleasant View.
AMHERST	5/11/2015	0	0.88	The public provided a report via Facebook of nickel-sized hail in the Pedlar Mills area or about three miles northeast of Naola.
AMHERST	5/11/2015	0	0.88	A storm spotter observed nickel-sized hail approximately five miles southwest of Amherst.
CAMPBELL	5/11/2015	0	1	A storm spotter observed quarter-sized hail approximately five miles southeast of Lynchburg.
CAMPBELL	5/11/2015	0	1	The public observed quarter-sized hail in Concord.
BEDFORD	6/1/2015	0	0.75	
AMHERST	6/1/2015	0	0.75	
BEDFORD	6/1/2015	0	1	Dime to quarter-size hail was observed on Camp Jaycee Road.
BEDFORD	6/17/2015	0	0.88	Dime to nickel-size hail was observed at Staunton River High School.
BEDFORD	7/13/2015	0	1	Quarter size hail fell on Planters Drive.
AMHERST	7/27/2015	0	0.88	Nickel hail fell at the intersection of Woodson Road and Lowesville Road.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	MAGNITUDE	DESCRIPTION
BEDFORD	8/4/2015	0	1	A SkyWarn spotter observed quarter-sized hail just north-northwest of Big Island.
AMHERST	8/4/2015	0	1	The public provided a report of quarter-sized hail via Twitter just north of Big Island.
CAMPBELL	8/4/2015	0	1	Several SkyWarn Spotters observed quarter-sized hail along Wards Road in Altavista, VA.
CAMPBELL	9/4/2015	0	1	
BEDFORD	9/4/2015	0	1	
BEDFORD	9/4/2015	0	1	
LYNCHBURG	5/1/2016	0	1	Quarter sized hail lasted for 10 minutes between 1047 PM EDT and 1057 PM EDT along Campbell Avenue based on radar estimates.
CAMPBELL	5/1/2016	0	1	Hail fell along Kimball Road in the community of Concord, VA.
AMHERST	5/2/2016	0	1	
BEDFORD	5/10/2016	0	1	
CAMPBELL	6/23/2016	0	0.88	
BEDFORD	6/23/2016	0	1	
LYNCHBURG	6/23/2016	0	1	



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	MAGNITUDE	DESCRIPTION
BEDFORD	6/23/2016	0	1.75	Multiple reports of golf ball sized hail near Forest.
LYNCHBURG	6/23/2016	0	1.75	
CAMPBELL	6/23/2016	0	1.5	Spotters reported hail ranging from quarter to ping pong ball size in Rustburg.
BEDFORD	6/23/2016	0	2.75	Multiple reports of hail ranging from quarter to baseball sized were reported. Some cars were damaged.
BEDFORD	7/19/2016	0	0.75	
BEDFORD	7/19/2016	0	1	
CAMPBELL	9/27/2016	0	1	
CAMPBELL	9/27/2016	0	1	
BEDFORD	9/28/2016	0	1.75	
BEDFORD	9/28/2016	0	1.5	Hail from the storm fell for several minutes.
AMHERST	9/28/2016	0	1	
BEDFORD	9/28/2016	0	1	
CAMPBELL	4/22/2017	0	1	
CAMPBELL	5/10/2017	0	0.75	
CAMPBELL	5/10/2017	0	1	



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	MAGNITUDE	DESCRIPTION
CAMPBELL	5/10/2017	0	1.25	
CAMPBELL	5/10/2017	0	0.88	
BEDFORD	5/19/2017	0	1.25	
BEDFORD	5/19/2017	0	1.75	
BEDFORD	6/4/2017	0	1	
BEDFORD	7/18/2017	0	1	
BEDFORD	5/10/2018	0	0.88	
BEDFORD	5/10/2018	0	0.75	
AMHERST	5/10/2018	0	1	
AMHERST	5/10/2018	0	1	
AMHERST	6/10/2018	0	0.75	
BEDFORD	7/11/2018	0	1	Quarter size hail fell at the Moneta Post Office.
APPOMATTOX	7/25/2018	0	0.75	Penny-size hail fell on State Route 636.
AMHERST	8/12/2018	0	1.25	Hail up to the size of half dollar coins fell in Madison Heights.
AMHERST	8/13/2018	0	0.75	Hail up to the size of pennies fell about five miles east of Alto.
BEDFORD	8/13/2018	0	0.88	Hail up to the size of nickels fell about two miles west-northwest of



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	MAGNITUDE	DESCRIPTION
				Stewartsville.
BEDFORD	8/13/2018	0	1	Hail up to the size of quarters fell on Gravel Hill Road.
AMHERST	8/13/2018	0	0.88	Hail up to the size of nickels fell on Grandmas Hill Road.
BEDFORD	8/13/2018	0	0.88	Hail up to the size of nickels fell in the town of Hardy.
BEDFORD	8/13/2018	0	0.88	Hail up to the size of nickels fell about four miles south-southeast of Stewartsville.
BEDFORD	8/13/2018	0	0.75	Hail up to the size of pennies fell about one mile west-southwest of Bedford.
AMHERST	8/30/2018	0	0.75	Hail up to the size of pennies fell in Madison Heights.
AMHERST	5/2/2019	0	1	Hail up to the size of quarters fell at the Lee and Moss grocery store along Wright Shop Road.
BEDFORD	5/29/2019	0	0.88	A couple mesoscale convective systems within a hot and humid air mass brought lines of severe thunderstorms during the afternoon and evening hours. The storms produced hail up to the size of half dollar coins and produced damaging winds that blew down numerous trees and power lines. At least 4,000 people lost power due to trees falling on to power lines, and a few structures also suffered damage.



Appendix H: Hazard Events

Severe thunderstorm, heavy rain, and lightning

Storm Events Database NCEI data - thunderstorm wind 2012-2019

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
AMHERST	2/24/2012	50	1000	Thunderstorm winds blew two large trees down in the town of Amherst. Damage values are estimated.
AMHERST	6/1/2012	65	20000	Thunderstorm winds blew thirty to forty trees down in a wooded area near Woodson Road. Damage values are estimated.
CAMPBELL	6/1/2012	50	500	Thunderstorm winds blew a tree down on Lynnbroad Road. Damage values are estimated.
CAMPBELL	6/1/2012	50	500	Thunderstorm winds blew a tree down on Sunnymead Road. Damage values are estimated.
LYNCHBURG	6/1/2012	60	5000	Thunderstorm winds downed power lines at Fort Avenue and Timberlake Road. Damage values are estimated.
BEDFORD	6/1/2012	55	7500	Thunderstorm winds blew multiple trees down. Damage values are estimated.
BEDFORD	6/1/2012	55	1500	Thunderstorm winds blew trees down on Red Hill School Road. Damage values are estimated.
BEDFORD	6/1/2012	57	0	
CAMPBELL	6/12/2012	60	3000	Thunderstorm winds blew shingles off a roof. Damage values are estimated.
APPOMATTOX	6/12/2012	55	500	Thunderstorm winds blew a tree down on Oakville Road. Damage values are estimated.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
CAMPBELL	6/12/2012	50	500	Thunderstorm winds blew a tree down on Bear Creek Road. Damage values are estimated.
CAMPBELL	6/12/2012	50	1000	Thunderstorm winds downed trees near Hat Creek. One of the trees fell along Irvindale Road, the other along Hat Creek Road. Damage values are estimated.
CAMPBELL	6/12/2012	55	7000	Thunderstorm winds help to bring trees and power lines down. Damage values are estimated.
CAMPBELL	6/21/2012	55	5500	Thunderstorm winds blew down one 10-inch maple tree and blew the tops off several large oak trees. Damage values are estimated.
LYNCHBURG	6/21/2012	55	7500	Thunderstorm winds downed multiple trees near Enterprise Drive. Damage values are estimated.
LYNCHBURG	6/21/2012	55	1500	Thunderstorm winds blew trees down near the corner of the Lynchburg Expressway and Lakeside Drive. Damage values are estimated.
LYNCHBURG	6/21/2012	55	2000	Thunderstorm winds blew trees down within the City of Lynchburg between the 300 block of Rivermont Avenue and 10th Street. Damage values are estimated.
CAMPBELL	6/21/2012	53	0	
BEDFORD	6/22/2012	50	1500	Thunderstorm winds blew trees down on Goose Creek Valley Road. Damage values are estimated.
AMHERST	6/22/2012	55	1500	Thunderstorm winds blew trees down on Route 635, North Fork of Buffalo River



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				Road. Damage values are estimated.
BEDFORD	6/29/2012	57	500000	Thunderstorm winds blew hundreds of trees down across the county. Some of these trees brought down power lines and also fell onto houses. A wind gust of 66 MPH was measured in Goode. Damage values are estimated.
AMHERST	6/29/2012	60	200000	Thunderstorm winds blew numerous trees down across the county. Many roads were blocked due to the downed trees. Damage values are estimated.
BEDFORD	6/29/2012	65	100000	Thunderstorm winds blew trees down. Some of these falling trees brought down power lines. Damage values are estimated.
CAMPBELL	6/29/2012	65	250000	Thunderstorm winds blew down hundreds of trees. The greatest concentration was over the northern half of the county. Damage values are estimated.
LYNCHBURG	6/29/2012	65	7120000	Thunderstorm winds blew down over 1,000 trees across the City of Lynchburg. Many power lines also came down as a direct result of the wind or trees and limbs falling on them. The winds damaged eight homes to the point of being deemed uninhabitable or destroyed. Damage values are estimated.
APPOMATTOX	6/29/2012	65	150000	Thunderstorm winds blew down around 100 trees across the county. Many of those trees brought down power lines. Damage values are estimated.
CAMPBELL	7/3/2012	50	5000	Power lines were reported down on Crestside Drive.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
BEDFORD	7/3/2012	50	300	A tree was reported blown down across intersection of Brookhill and Cifax Roads.
CAMPBELL	7/3/2012	50	1000	Tree limbs were blown down onto power lines on Doewood Place.
CAMPBELL	7/3/2012	55	10000	Trees and powerlines were down along Brookneal Highway in southern Campbell County.
CAMPBELL	7/3/2012	50	5000	Power lines were down on Pigeon Run Road.
CAMPBELL	7/3/2012	50	5000	A tree fell across powerlines along Mollies Creek Road.
BEDFORD	7/8/2012	50	4000	Power lines were blown down by thunderstorm winds on Parker Road.
BEDFORD	7/8/2012	50	4000	Three trees down in reported down in Chamblissburg, the tree diameters were 8-10 inches. Also, power lines were down on Route 24.
APPOMATTOX	7/9/2012	50	600	Trees were blown down on Red House Road.
AMHERST	7/23/2012	50	300	A tree was blown down on Poorhouse Farm Road.
AMHERST	7/23/2012	50	300	Thunderstorm winds blew down a tree on Cherry Hill Road.
BEDFORD	7/27/2012	50	600	Two trees were blown down on Lee Jackson Highway near Shortcut Road.
LYNCHBURG	7/27/2012	55	8000	Numerous trees, limbs and wires brought down by winds throughout Lynchburg. The siding off a building on Park Avenue was also ripped off.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
AMHERST	7/27/2012	50	600	Two trees were down at Lynchburg reservoir about 3/4 mile upstream of Pedlar Dam.
AMHERST	7/27/2012	55	10000	Numerous trees, limbs and wires down throughout the town of Amherst. A large portion of town was left without power. Damage extended east along the Route 60 corridor for about 10 miles with several reports of trees or numerous large tree limbs blown down.
AMHERST	7/27/2012	55	5000	Thunderstorm winds brought down several trees.
AMHERST	7/27/2012	50	0	Numerous large tree limbs blown down along Old Galilee Road.
BEDFORD	1/30/2013	54	0	This wind gust was measured with home weather station equipment.
AMHERST	1/30/2013	52	2000	A few trees were blown down by thunderstorm winds along the Buffalo Springs Turnpike.
BEDFORD	1/30/2013	55	5000	Thunderstorm winds blew down several trees in Huddleston.
AMHERST	3/16/2013	50	5000	Thunderstorm winds brought down several trees off Riverview Road and torn down fencing.
BEDFORD	4/19/2013	50	5000	The Bedford County 911 Center reported that a number of trees were down near the intersection of Falling Creek Road and Glenwood Drive just northeast of Huddleston. Another tree was down along Elk Lake Lane just west of Forest.
BEDFORD	4/19/2013	52	15000	Southwest Virginia Broadcast Media



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				reported that from 30 to 40 trees were blown down approximately five miles northwest of Evington. The Bedford County 911 Center reported that another tree was down near the intersection of Virginia Route 24 and New London Road., also just northwest of Evington.
LYNCHBURG	4/19/2013	50	3000	The Lynchburg City 911 Center reported that one tree was down across the road at the intersection of Link Road and Hurdle Hill Road, a tree and powerline were down near the 2500 block of Mayflower Drive, and another power/phone line was down at the intersevation of 12th and Kemper Streets, all within the City of Lynchburg.
CAMPBELL	4/19/2013	50	5000	A trained spotter reported that one tree was blown down onto a home on Frazier Road just north of Alta Vista and another tree was down along Lynch Mill Road.
APPOMATTOX	4/19/2013	56	50000	WSET Television of Lynchburg, Virginia and a trained storm spotter reported that nearly two dozen trees and several power lines were blown down down around Appomattox, mainly on the west and north side of the city. A considerable amount of damage was noted on High Street in Appomattox, just north of downtown Appomattox. Some homes on Country Club road were damaged from downed trees. The damage on Country Club Street alone was estimated to be near \$10,000. Although to some the damage appeared to have been caused by a tornado, it was determined that the damage was a result of strong thunderstorm straight-line winds, not a tornado.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
BEDFORD	5/11/2013	52	1500	A few trees were blown down by thunderstorm winds on Dickerson Mill Road.
BEDFORD	6/10/2013	50	500	Thunderstorm winds blew one large tree down across Route 122 near Moneta. Damage values are estimated.
BEDFORD	6/10/2013	50	500	Thunderstorm winds blew one tree down on Rock Cliff Road. Damage values are estimated.
BEDFORD	6/13/2013	50	1000	Thunderstorm winds along a squall line downed several large tree limbs. Damage values are estimated.
BEDFORD	6/13/2013	55	20000	Thunderstorms wind associated with a squall line blew down numerous trees in and near the Stewartsville area. Damage values are estimated.
AMHERST	6/13/2013	50	1000	Thunderstorm winds along a squall line uprooted two trees in the 400 block of South Five Forks Road. Damage values are estimated.
CAMPBELL	6/13/2013	50	200000	Thunderstorms produced damaging winds along a squall line that moved through the City of Lynchburg and Campbell County. Numerous trees and tree limbs were blown down throughout this region along with some power lines. Specific examples include numerous trees down in Timberlake, numerous trees and power lines down in and around the City of Lynchburg, numerous oak trees blown down in Altavista, some trees down and trees uprooted near Concord.
BEDFORD	6/13/2013	55	150000	Thunderstorms along a squall line moved



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				through Bedford County and the City of Bedford. The associated damaging winds blew down numerous trees and tree limbs. A number of these were reported near Goode and Evington VA, as well as in the City of Bedford. Also in the City of Bedford, a tractor trailer was blown over. Damage values are estimated.
BEDFORD	6/13/2013	55	5000	Thunderstorm winds from a squall line brought trees and power lines down from Thomasson Mill Road southeast of Stewartsville through Smith Mountain Lake and to Planters Drive near Huddleston. Damage values are estimated.
CAMPBELL	6/13/2013	50	10000	Thunderstorms along an associated squall line produced winds that downed and uprooted numerous trees. Dime size hail also occurred. Damage values are estimated.
BEDFORD	6/26/2013	55	22000	Thunderstorm winds blew down trees and tree limbs in the Stewartsville to Goodview area of the county. Some power lines also came down as a result of the falling trees. Damage values are estimated.
BEDFORD	6/26/2013	50	1500	Thunderstorm winds blew three trees down on Perrowville Road near the Ivy Hill/Candlestick Park area. Damage values are estimated.
LYNCHBURG	6/26/2013	50	3000	Thunderstorm winds blew a few trees down in the City of Lynchburg. Damage values are estimated.
BEDFORD	7/3/2013	70	2000	A thunderstorm produced microburst/straight line winds that caused tree and some structure damage.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
APPOMATTOX	7/20/2013	50	500	One tree was blown down by thunderstorm winds at the intersection of Route 608 and Route 613 that brought down a light pole. A second tree was reported down along Stonewall Road.
AMHERST	7/20/2013	50	3000	Three telephone poles were knocked down along Hillcrest Circle.
APPOMATTOX	7/24/2013	50	900	Three separate single tree down reports were received.
APPOMATTOX	7/24/2013	50	400	Thunderstorm winds blew down a tree across Old Courthouse Road.
CAMPBELL	9/21/2013	50	1000	Two trees were blown down on Leesville Road just north of the Town Fork Road.
BEDFORD	5/28/2014	55	5000	Several trees were blown down across the Town of Bedford, with one tree falling onto power lines.
BEDFORD	6/10/2014	50	2000	Thunderstorm winds blew several large limbs down near Peaks of Otter Lodge. Damage values are estimated.
AMHERST	6/11/2014	50	1000	Thunderstorm winds blew two trees down along Route 130, one near Mt. Tabor Road and another near Buffalo Springs Turnpike. Damage values are estimated.
CAMPBELL	6/11/2014	60	10000	Thunderstorm winds blew trees down between the area of New London and Timberlake. Damage values are estimated.
LYNCHBURG	6/11/2014	60	500000	Thunderstorm winds toppled a crane at Liberty University. Damage values are estimated.
CAMPBELL	6/11/2014	50	3000	Thunderstorm winds blew trees down in



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				Gladys. Damage values are estimated.
BEDFORD	6/11/2014	55	10000	Thunderstorm winds blew several trees down. Damage values are estimated.
AMHERST	6/11/2014	55	7500	Thunderstorm winds blew down multiple trees along Reservoir Road leading to Pedlar Dam. Damage values are estimated.
BEDFORD	6/12/2014	50	2000	Thunderstorm winds blew large tree limbs down. Damage values are estimated.
BEDFORD	6/18/2014	50	3000	Thunderstorm winds blew trees down. Damage values are estimated.
CAMPBELL	6/20/2014	55	3000	Thunderstorm winds blew trees down along Mollies Creek Road. Damage values are estimated.
CAMPBELL	6/20/2014	55	12000	Thunderstorm winds blew a couple dozen trees down near Brookneal. Multiple trees were blown down near Swinging Bridge Road, and others were blown down along Highway 40, blocking the traffic flow both ways. Damage values are estimated.
CAMPBELL	6/20/2014	55	8000	Thunderstorm winds blew down powerlines near a mobile home. The sparks set trees on fire. Damage values are estimated.
BEDFORD	6/20/2014	55	1000	Thunderstorm winds blew a couple of trees down near the intersection of Goode and Goode Station Road. Damage values are estimated.
APPOMATTOX	6/21/2014	50	500	Thunderstorm winds blew a tree down on Watt Abbitt Road. Damage values are estimated.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
AMHERST	7/3/2014	50	500	Large tree limbs were reported blown down by thunderstorm winds south of MM 49.3 on the Blue Ridge Parkway.
APPOMATTOX	7/8/2014	50	7000	Trees were reported down in several locations. Trees were reported down on Police Tower Road, Reedy Spring Road, Paradise Road, and Stonewall Road.
CAMPBELL	7/8/2014	50	1500	Thunderstorm winds blew down a power line in Concord. A tree was also blown down northeast of Concord.
APPOMATTOX	7/8/2014	50	500	Thunderstorm winds blew down a tree on Holliday Lake Road.
BEDFORD	7/9/2014	50	1000	Two trees were knocked down at intersection of Wyatts Way and Tucker Terrace.
CAMPBELL	7/9/2014	60	50000	About 100 trees were blown down due to straight-line winds along with two barn roofs blown off and a barn collapsed. Six more trees were reported down at intersection of Leesville Road and Ridge Road.
CAMPBELL	7/9/2014	50	7000	Thunderstorm winds blew the siding and shingles off a home. One tree was blown down on Wards Road, and multiple trees were blown down on Gough Road near the intersection of route 42.
BEDFORD	7/24/2014	50	10000	A report was made of numerous large trees blown down by thunderstorm winds at Peak of Otter Lodge and along Highway 43.
AMHERST	8/21/2014	50	500	The Amherst County 911 Center reported that a tree was down blocking Ambrose-Rucker Road, approximately one mile



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				north-northwest of Elon.
CAMPBELL	8/21/2014	50	500	The Campbell County 911 Center reported that a tree was down blocking Bethany Road, approximately one mile east-southeast of Rustburg.
AMHERST	5/11/2015	50	500	The Amherst County 911 Center reported that a tree was blown down by thunderstorm winds on Kings Road, approximately two miles north of Lynchburg.
AMHERST	5/11/2015	50	500	The Amherst County 911 Center reported that a tree was blown down by thunderstorm winds on Campbell Street or approximately two miles east-northeast of Lynchburg.
CAMPBELL	5/11/2015	55	15000	The Campbell County Emergency Management Director, along with trained spotters and the public, reported that several trees were down in the Timberlake area of northern Campbell county, or just south of Lynchburg. One tree was uprooted onto a car near the intersection of Horseman Drive and Sleepy Hollow Road. Another tree was down on Timberlake Drive, and two trees were down near the Waterlick Shopping Center.
LYNCHBURG	6/13/2015	50	1000	A tree was blown down onto cable lines on Greenwood Drive.
CAMPBELL	6/13/2015	50	2000	A tree was blown down onto a car, breaking the windshield, on Depot Road.
BEDFORD	6/14/2015	50	500	One tree was blown down along Highway 460 in the vicinity of the community of Montvale.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
BEDFORD	6/14/2015	50	500	One tree was blown down near the intersection of Highway 460 and Irving Road.
BEDFORD	6/14/2015	50	500	One tree was blown down along the W Lynchburg Salem Turnpike.
AMHERST	6/18/2015	55	3000	Several trees were blown down along U.S. Highway 29 near Falconerville.
AMHERST	6/18/2015	55	15000	Trees were reported blown down along Elon Road, Oak Ridge Court, Kenmore Road and on River Road. A tree was blown down onto a home on Odins Bow Road. A tree was blown down onto a powerline on Orchard Drive.
APPOMATTOX	6/18/2015	50	500	A tree was blown down along Oakville Road.
BEDFORD	6/18/2015	50	500	A tree was blown down along Elkton Farm Road in the community of Forest.
APPOMATTOX	6/18/2015	55	5000	Eight to ten trees were blown down along Wagon Wheel Road.
APPOMATTOX	6/18/2015	50	500	A tree was blown down at Holliday Lake State Park.
BEDFORD	6/18/2015	50	1500	Several large tree limbs were blown down along Clover Creek Road.
CAMPBELL	6/20/2015	50	1500	A tree was blown down on Gladys Road and two trees were blown down on Long Island Road.
LYNCHBURG	6/27/2015	50	500	A few tree limbs were blown down onto power lines along Trents Ferry Road.
AMHERST	6/30/2015	50	1000	Two trees were blown down along Route



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				60.
BEDFORD	6/30/2015	50	500	A tree was blown down along Route 704.
BEDFORD	6/30/2015	50	1000	Strong thunderstorm winds blew down two trees in the Huddleston area, including one along Smith Mountain Lake Parkway.
CAMPBELL	7/13/2015	50	1000	Thunderstorm wind blew a couple of trees down in the Sunnymead area. Damage values are estimated.
CAMPBELL	7/13/2015	50	1000	Thunderstorm winds blew two trees down along Sunnymead Road near Rustburg, VA. Damage values are estimated.
CAMPBELL	7/13/2015	50	1000	Thunderstorm winds blew two trees down along Route 501 South in Gladys, VA. Damage values are estimated.
CAMPBELL	7/13/2015	50	500	Thunderstorm winds blew a tree down along Oxford Furnace Road west of Concord, VA. Damage values are estimated.
APPOMATTOX	7/14/2015	50	700	Thunderstorm winds blew a tree and large limbs down. The tree fell on Holly Brook Drive. Damage values are estimated.
BEDFORD	7/14/2015	50	2000	Thunderstorm wind blew four trees down along the south side of Bedford. Joppa Mill Road, Casey Lake Road, Moneta Road, and Broken Bow Road each had a tree fall upon it. Damage values are estimated.
AMHERST	8/4/2015	50	500	The Amherst County 911 Center reported that a tree was down along Lowesville Road approximately five miles northwest of Amherst.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
AMHERST	8/4/2015	55	3000	The Amherst County 911 Center reported that several trees were down along Turkey Mountain Road approximately five miles north of Amherst.
AMHERST	8/4/2015	56	5000	The Amherst County 911 Center reported that multiple trees were down along Patrick Henry Way approximately two miles north-northeast of Clifford.
CAMPBELL	8/11/2015	50	500	The Campbell County 911 Center reported that a tree was down on Red House Road near its intersection with Rhonda Road, blocking both lanes of the road. This occurred approximately four miles northeast of Gladys.
CAMPBELL	8/11/2015	50	500	The Campbell County 911 Center reported that a tree was down blocking Lambs Church Road approximately three miles north of Hodges.
BEDFORD	2/24/2016	50	5000	A small barn was severely damaged by thunderstorm winds.
APPOMATTOX	4/7/2016	50	2000	Several large tree limbs were blown down on Winery Lane. Damage values are estimated.
AMHERST	5/2/2016	52	2000	Thunderstorm winds resulted in the downing of multiple trees along Route 501 near the Rockbridge and Amherst County Line.
BEDFORD	5/12/2016	50	500	Thunderstorm winds downed large tree limbs in this area.
APPOMATTOX	6/2/2016	52	500	Thunderstorm winds blew down one tree down along Route 60 near Bent Creek.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
BEDFORD	6/4/2016	55	4000	Thunderstorm winds knocked multiple trees down on Quarterwood Road.
AMHERST	6/4/2016	50	500	Thunderstorm winds brought a tree down on Route 60 near Moss Rock Road.
BEDFORD	6/4/2016	55	4000	Thunderstorm wind knocked down multiple trees along Goode Station Road near Goode.
BEDFORD	6/4/2016	55	5000	Thunderstorm wind knocked multiple trees down in the community of Forest.
AMHERST	6/16/2016	60	10000	Thunderstorm winds blew over a barn on Green Hill Road.
LYNCHBURG	6/16/2016	50	1000	Reports of two trees down from thunderstorm winds at Graves Mill Road and Breezewood Drive.
CAMPBELL	6/16/2016	65	100000	Over 50 trees in the county were blown over by thunderstorm winds. Most of the damage was near the town of Forest. Trees were blown onto 7 to 10 houses along Timberlake Drive and some people were trapped in their homes.
CAMPBELL	6/16/2016	50	1000	Thunderstorm winds blew down two trees. One tree was blown down at the intersection of Greenview and Portico streets. The second tree fell at the intersection of Wexford and Leeville Road.
CAMPBELL	6/16/2016	55	1000	Thunderstorm winds blew trees over on Mason Mill Road.
CAMPBELL	6/16/2016	50	500	Thunderstorm winds blew off several large tree limbs.
CAMPBELL	6/16/2016	55	2000	Thunderstorm winds knocked trees down



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				onto Allen Road.
CAMPBELL	6/23/2016	55	5000	Thunderstorm winds blew down several large trees near Yellow Branch Elementary School.
BEDFORD	6/23/2016	52	1000	Thunderstorm winds blew trees down on Big Island Highway.
CAMPBELL	6/23/2016	50	500	Thunderstorm winds brought down a tree on Clarks Road.
LYNCHBURG	6/27/2016	50	500	Thunderstorm winds blew down a tree two miles west of Lynchburg.
LYNCHBURG	6/27/2016	50	500	One tree was knocked down by thunderstorm winds at the intersection of Lexington Drive and Inglewood Road.
CAMPBELL	7/4/2016	50	1000	Two large oak trees were blown down by thunderstorm winds along Bishop Creek Road near the community of Altavista.
CAMPBELL	7/4/2016	50	500	A tree was blown down by thunderstorm winds near the intersection of Hat Creek Road and White Tail Road.
BEDFORD	7/8/2016	50	500	One tree that was two feet in diameter was blown down by thunderstorm winds, blocking part of Turner Branch Road.
LYNCHBURG	7/13/2016	50	2000	Thunderstorm winds blew down one tree on the 501 Expressway, while another tree fell down on an attached garage east of Forest, but causing no major damage.
CAMPBELL	7/14/2016	50	1000	Thunderstorm winds brought down two trees.
LYNCHBURG	7/26/2016	50	1500	Trees were blown down by thunderstorm



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				winds along Hollins Mill, Overbrook and Langhorne Roads.
CAMPBELL	7/26/2016	50	20000	A tree was blown down by thunderstorm winds onto a house on Spring Oaks Drive.
CAMPBELL	7/26/2016	50	20000	A tree was blown down by thunderstorm winds onto a house along Eastbrook Road.
CAMPBELL	7/26/2016	50	500	One tree was blown down by thunderstorm winds on Epsons Road.
CAMPBELL	7/26/2016	50	500	One tree was blown down by thunderstorm winds on Mount Calvary Road.
BEDFORD	7/28/2016	50	5000	A large tree was blown down by thunderstorm winds onto a garage.
LYNCHBURG	7/28/2016	50	1500	A large tree was blown down by thunderstorm winds across a power line along Forrest Brook Road.
LYNCHBURG	7/28/2016	50	500	A large tree was blown down by thunderstorm winds at the intersection of Park Avenue and Fort Avenue.
AMHERST	7/28/2016	50	5000	Several trees and powerlines were blown down by thunderstorm winds along Riverville Road.
AMHERST	7/28/2016	50	500	A large tree was blown down by thunderstorm winds along Riverville Road.
BEDFORD	7/28/2016	50	1000	Thunderstorm winds brought down a large tree at the intersection of Feldspar Road and Morgans Church Road. Another tree was blown down along White House Road.
BEDFORD	7/28/2016	50	500	A large tree was blown down by



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				thunderstorm winds along Route 460 near Johnson School Road.
BEDFORD	7/28/2016	50	500	A large tree was blown down by thunderstorm winds along Lizard Ridge Road.
LYNCHBURG	7/28/2016	50	500	A large tree was blown down by thunderstorm winds on Route 501.
CAMPBELL	7/28/2016	50	500	A large tree was blown down by thunderstorm winds across Dearborn Road.
APPOMATTOX	7/28/2016	50	500	A large tree was blown down by thunderstorm winds along Route 635.
APPOMATTOX	7/30/2016	50	1500	Two trees were blown down by thunderstorm winds along Route 615. Another tree was blown down on Watt Abbitt Road.
APPOMATTOX	7/30/2016	50	500	A large tree was blown down by thunderstorm winds along Liberty Chapel Road.
BEDFORD	8/6/2016	50	1500	Thunderstorm winds blew three trees down along Bethel Church Road. Damage values are estimated.
CAMPBELL	8/6/2016	50	500	Thunderstorm winds blew a tree was blown down along Turkey Foot Road. Damage values are estimated.
BEDFORD	8/6/2016	50	7500	Thunderstorm winds blew multiple trees down along Bishop Creek Road. Damage values are estimated.
AMHERST	8/14/2016	50	2000	Thunderstorm winds blew four trees down along Highway 29 near the intersection



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				with U.S. 60. Damage values are estimated.
BEDFORD	8/17/2016	55	1500	Thunderstorm winds blew three trees down southeast of Montvale. The downed trees were located in the the following locations: the 6400 block of Quarterwood Road, the 2700 block of Quarles Road, and the 3400 block of Quarles Road. Damage values are estimated.
BEDFORD	8/17/2016	50	500	Thunderstorm winds blew one tree down along Holcomb Rock Road. Damage values are estimated.
AMHERST	8/17/2016	50	500	Thunderstorm winds blew one tree down along Lexington Parkway. Damage values are estimated.
BEDFORD	9/28/2016	60	5000	Thunderstorm winds resulted in numerous trees down along Holcomb Rock Road.
LYNCHBURG	9/28/2016	50	2000	Thunderstorm winds brought a power Line down on Rivermont Avenue.
AMHERST	9/28/2016	50	500	Several large tree limbs were blown down by thunderstorm winds.
BEDFORD	9/29/2016	50	500	Thunderstorm winds toppled a tree along Porters Mountain Road near Blue Ridge.
BEDFORD	9/29/2016	50	500	Thunderstorm winds downed a tree along Breezy Ridge Road.
CAMPBELL	2/25/2017	50	1000	Thunderstorm winds split part of a tree near Lynchburg which then damaged a chain link fence.
AMHERST	2/25/2017	50	500	Thunderstorm winds brought down several large tree limbs on Indian Valley Road.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
BEDFORD	3/1/2017	50	200	Thunderstorm winds snapped an 18-inch diameter branch off of a tree.
APPOMATTOX	3/1/2017	55	5000	Multiple trees were blown down across western Appomattox County, including trees along Beckham Road and along Vermillion Road.
CAMPBELL	3/1/2017	50	15000	Four trees and several power lines were blown down by thunderstorm winds across western portions of Campbell County.
APPOMATTOX	5/1/2017	50	2000	Thunderstorm winds downed three to four trees along Richmond Highway near Pamplin.
CAMPBELL	5/1/2017	50	500	Thunderstorm winds downed a tree along Bethany Road.
BEDFORD	5/5/2017	50	500	Thunderstorm winds downed a tree near the intersection of Smith Mountain Lake Parkway and Carters Mill Road.
AMHERST	5/5/2017	55	5000	Thunderstorm winds downed several trees along Boxwood Farm Road.
APPOMATTOX	5/5/2017	50	500	Thunderstorm winds downed a tree on Cub Creek Road.
APPOMATTOX	5/5/2017	50	500	Thunderstorm winds downed a tree along Rock Church Road.
APPOMATTOX	5/10/2017	50	1000	Thunderstorm winds downed two trees on Police Tower Road.
CAMPBELL	5/10/2017	50	500	Thunderstorm winds downed a tree near the intersection of Wheeler and Plumb Branch Roads.
BEDFORD	5/19/2017	50	500	Thunderstorm winds resulted in a downed



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				tree across Falling Creek Road.
CAMPBELL	5/19/2017	50	2500	Thunderstorm winds downed a tree on a vehicle near the intersection of Marysville Road and East Ferry Road.
CAMPBELL	5/19/2017	50	2000	Thunderstorm winds brought down a tree on a car at the intersection of East Ferry Road and Marysville Road.
CAMPBELL	5/19/2017	50	500	Thunderstorm winds brought down a tree on Red House Road.
BEDFORD	6/4/2017	50	500	Thunderstorm wind gusts knocked down a tree.
BEDFORD	6/4/2017	50	500	Thunderstorm wind gusts caused a large limb to fall and block Smith Mountain Lake Parkway.
BEDFORD	6/15/2017	50	500	Thunderstorm wind gusts caused a tree to fall down on Jordon Town Road.
AMHERST	6/15/2017	50	1000	Several small to large limbs were reported down due to thunderstorm wind gusts between Elon and Madison Heights.
BEDFORD	6/19/2017	55	5000	The county sheriff reported that several trees were blown down by thunderstorm winds along the Lee Jackson Highway between the communities of Big Island and Coleman Falls.
AMHERST	6/19/2017	50	500	A tree was blown down by thunderstorm winds along Highway 130.
AMHERST	6/19/2017	50	500	A large tree was blown down by thunderstorm winds along Highway 60.
CAMPBELL	7/4/2017	50	1000	Two trees were blown down and a crop of



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				corn damaged along Bear Creek Road.
CAMPBELL	7/6/2017	50	500	One tree was blown down by thunderstorm winds along Timberlake Drive.
CAMPBELL	7/6/2017	50	1000	One tree was blown down by thunderstorm winds along Beaver Creek Crossing and another was blown down along Camp Hydaway Road.
CAMPBELL	7/6/2017	50	500	One tree was blown down by thunderstorm winds along Toll Gate Road.
BEDFORD	7/18/2017	50	3000	Multiple trees were blown down by thunderstorm winds along Tolers Ferry Road.
BEDFORD	7/22/2017	50	3000	Thunderstorm winds blew a tree down onto a power line near the intersection of Goode Station Road and Forest Road.
LYNCHBURG	7/22/2017	50	500	One tree was blown down by thunderstorm winds along the 200 block of Buckingham Road in the Timberlake area.
LYNCHBURG	7/22/2017	50	1000	Two large trees were blown down by thunderstorm winds near the intersection of Wigginton and Chadwick Roads.
LYNCHBURG	7/22/2017	50	1000	Thunderstorm winds blew a tree down near the intersection of Link Road and Boonsboro Road. Another tree was blown down along the 2200 block of Taylor Farm Road.
BEDFORD	8/21/2017	50	1000	Thunderstorm outflow winds, along with heavy water loading from torrential rains, brought down two trees within the community of Forest, VA. Damage values



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				are estimated.
CAMPBELL	10/23/2017	50	500	Thunderstorm winds knocked down a tree on Sandusky Drive in Lynchburg.
BEDFORD	10/23/2017	50	500	Thunderstorm winds knocked down one tree along the Lee Jackson Highway.
BEDFORD	4/15/2018	50	200	Large tree limbs were blown down by thunderstorm winds.
BEDFORD	4/15/2018	50	10000	Debris from a cattle barn was blown on to Meadors Spur Road.
CAMPBELL	4/15/2018	50	1000	One tree was blown down along Whipping Creek Road, and another tree was blown down along the Brookneal Highway.
CAMPBELL	5/10/2018	50	1500	Thunderstorm winds brought down a few trees on East Ferry Road.
BEDFORD	5/22/2018	55	5000	Thunderstorm winds blew down multiple trees and mangled fences on Dickerson Mill Road in Moneta.
CAMPBELL	5/22/2018	50	1000	Thunderstorm winds brought down trees on Dog Creek Road.
AMHERST	6/9/2018	50	2000	A few trees were blown down by severe thunderstorm winds across the community of Amherst.
AMHERST	6/9/2018	50	1000	Several large limbs were blown down out of trees by severe thunderstorm winds.
LYNCHBURG	6/9/2018	50	500	A tree was blown down along John Scott Drive by severe thunderstorm winds.
LYNCHBURG	6/9/2018	50	500	A tree was blown down in the Blue Ridge Farms Neighborhood by severe



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				thunderstorm winds.
LYNCHBURG	6/9/2018	50	500	A tree was blown down by thunderstorm winds along Landover Place.
LYNCHBURG	6/9/2018	50	500	A tree was blown down by thunderstorm winds along the entrance ramp to Highway 501 from Fort Avenue.
AMHERST	6/10/2018	60	45000	Considerable damage occurred to a residential farm property due to thunderstorm winds. A large barn was completely destroyed, with debris scattered a significant distance away. Numerous trees in the nearby area were damaged or blown down by the thunderstorm winds.
AMHERST	6/10/2018	50	1000	A large tree was blown down by thunderstorm winds along Lowesville Road while another tree was blown down at Stonehouse Lake.
CAMPBELL	6/20/2018	50	1000	One tree and a piece of fencing was blown down by thunderstorm winds along Whitehall Road.
CAMPBELL	6/22/2018	50	20000	A tree was blown down onto a house by thunderstorm winds along Independence Circle.
BEDFORD	6/22/2018	50	500	One tree was blown down by thunderstorm winds near the intersection of Shadwell Drive and Hawkins Mill Road.
CAMPBELL	6/22/2018	50	500	One tree was blown down by thunderstorm winds near the intersection of Cabin Field Road and Stage Road.
AMHERST	7/6/2018	50	1500	Thunderstorm winds blew three trees



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				down. Damage values are estimated.
BEDFORD	7/11/2018	50	6500	Thunderstorm winds blew down one large tree at the Moneta Post Office, with numerous large tree limbs down in the same immediate area. The tree damage resulted in downed power line and loss of power to the general area. Damage values are estimated.
AMHERST	7/16/2018	50	1500	Thunderstorm winds downed a tree and other large branches in the 200 block of Abbitts Drive near Lynchburg, VA. Damage values are estimated.
AMHERST	7/16/2018	50	10000	Thunderstorm winds blew several trees down on, and around, a house in the 200 block along Dixie Airport Road. Damage values are estimated.
CAMPBELL	8/1/2018	50	5500	Thunderstorm winds blew down one tree and one power line on Juniper Cliff Road in Brookneal.
CAMPBELL	8/2/2018	50	6000	Thunderstorm winds blew down two trees on to power lines in the Windcrest Manor area along Timberlake Drive.
CAMPBELL	8/12/2018	50	1000	Thunderstorm winds blew down one tree near the intersection of Three Creeks Road and Lewis Ford Road and a second tree near the intersection of Route 501 and Swinging Bridge Road.
AMHERST	8/12/2018	50	11000	Thunderstorm winds blew down multiple trees and power lines along Dixie Airport Road in Madison Heights.
BEDFORD	8/13/2018	50	200	Thunderstorm winds blew down two large tree branches about six miles east of



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				Stewartsville.
AMHERST	8/30/2018	50	500	Thunderstorm winds blew down one tree about three miles south of Falconerville.
AMHERST	8/30/2018	50	500	Thunderstorm winds blew down one tree about two miles east-southeast of Falconerville.
CAMPBELL	9/1/2018	70	25000	Thunderstorm winds caused substantial damage along Dearing Ford Road in Lynch Station. Numerous trees were brought down and the steeple was blown off of the Bethany Ebenezer United Methodist Church.
BEDFORD	4/8/2019	50	2000	Thunderstorm winds blew two mature pine trees down onto a power line near Little Echo Lane. Damage values are estimated.
APPOMATTOX	4/14/2019	50	500	Thunderstorm winds blew a tree down near the intersection of Old Courthouse Road and Holiday Lake Road. Damage values are estimated.
APPOMATTOX	4/14/2019	50	500	Thunderstorm winds blew a tree down on Red House Road. Damage values are estimated.
CAMPBELL	4/15/2019	50	500	Thunderstorm winds blew one tree down along Colonial Highway close to the Campbell - Bedford County line. Damage values are estimated.
CAMPBELL	4/15/2019	50	500	Thunderstorm winds blew a tree down on Tardy Mountain Road close to the intersection of Oliver Road. Damage values are estimate.
CAMPBELL	4/15/2019	50	200	Thunderstorm winds blew a large limb off a



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				tree near the intersection of Brookneal Highway and Colonial Highway. Damage values are estimated.
CAMPBELL	4/15/2019	50	500	Thunderstorm winds blew a tree down near the intersection of Spring Mill Road and Mud Street. Damage values are estimated.
BEDFORD	4/15/2019	50	10000	Thunderstorm winds blew a carport off its foundation. The carport subsequently impacting a neighboring church building, damaging this second structure. Damage values are estimated.
BEDFORD	4/19/2019	60	15000	Thunderstorm winds blew multiple trees down, and a carport was destroyed near the intersection of Routes 460 and 831. Damage values are estimated.
APPOMATTOX	4/19/2019	50	4000	Thunderstorm winds blew numerous large tree limbs down at Appomattox Court House National Historical Park. Damage values are estimated.
AMHERST	5/29/2019	50	1500	Thunderstorm winds blew down multiple trees near the intersection of Route 60 and Pedlar River Road.
AMHERST	5/29/2019	55	20000	Thunderstorm winds blew down widespread trees along Lowesville Road and Indian Creek Road. One of those trees fell on a business.
BEDFORD	5/29/2019	55	10000	Thunderstorm winds blew down one tree on to a trailer along Bruno Drive, blew down multiple trees near the intersection of Sandy Level Road and Goodview Town Road, and shattered windows to a residence on Emmaus Church Road.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
BEDFORD	5/29/2019	50	500	Thunderstorm winds blew down one tree on Joppa Mill Road about six miles north-northeast of Moneta.
CAMPBELL	5/29/2019	55	20000	Thunderstorm winds snapped several trees and large branches on Mt. Calvary Road. In addition, the winds blew a few shingles off at least one home, blew down a carport, and destroyed a shed.
CAMPBELL	5/29/2019	55	3500	Thunderstorm winds blew down seven trees along Blue Mist Road about two miles north-northwest of Brookneal.
BEDFORD	5/31/2019	55	15000	Thunderstorm winds blew down numerous trees and tree limbs along Waters Edge Lane near Smith Mountain Lake. One of the trees uprooted and broke a window of a home as it fell.
CAMPBELL	5/31/2019	55	30000	Thunderstorm winds blew down a couple of trees in Altavista. The winds also blew down numerous tents and a few portable toilets at a large festival in English Park. Two people suffered minor injuries at the festival.
BEDFORD	6/2/2019	55	20000	Several trees were blown down by straightline thunderstorm winds across eastern Bedford County, including trees down on Jordantown Road, Hardy Road and Beagle Club Drive.
CAMPBELL	6/18/2019	50	500	Thunderstorm winds blew down a tree along Swinging Bridge Road near Brookneal Highway.
BEDFORD	6/24/2019	50	500	Thunderstorm winds blew down a tree along Big Island Highway near Coltons Mill Road.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
BEDFORD	6/29/2019	50	10000	A tree was blown down by thunderstorm winds onto a house along the 5000 block of Lynchburg Salem Turnpike in the community of Thaxton.
BEDFORD	6/29/2019	50	12000	Thunderstorm winds blew down a tree and the wall of a building that was under construction.
BEDFORD	7/2/2019	60	10000	Several trees and a large branch were blown down by thunderstorm winds along Blankenship Road about one mile east of Stewartsville. One tree brought down a power line when it fell. The winds also blew the roof off of a storage shed along Regency Drive.
AMHERST	7/11/2019	55	3000	A few trees and utility poles were snapped by thunderstorm winds along Stallings Lane.
AMHERST	7/11/2019	50	500	A tree was blown down by thunderstorm winds on Virginia Highway 130.
CAMPBELL	7/11/2019	50	1500	Thunderstorm winds downed a couple trees, as well as snapped large limbs along Lewis Ford Road.
BEDFORD	7/21/2019	60	30000	Thunderstorm winds downed numerous trees, several utility poles and street signs. The sides of a mobile home were also torn off by the thunderstorm winds.
LYNCHBURG	7/21/2019	55	21000	Approximately 20 trees were blown down by thunderstorm winds in the Lynchburg area. Several of the trees fell onto power lines, bringing them down. One tree fell on a chain link fence, destroying the fence.
APPOMATTOX	7/21/2019	55	2500	A few trees were blown down by



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				thunderstorm winds along Route 460.
APPOMATTOX	7/21/2019	55	2500	A few trees were blown down by thunderstorm winds on Oakville Road.
AMHERST	7/21/2019	50	500	A tree was blown down by thunderstorm winds near the intersection of Elon Road and River Road.
AMHERST	7/21/2019	50	500	A large tree was blown down by thunderstorm winds.
BEDFORD	7/22/2019	55	3000	Approximately half a dozen trees were blown down by thunderstorm winds around Moneta.
BEDFORD	7/22/2019	55	6000	Approximately a half dozen trees were downed by thunderstorm winds in the Coleman Falls and Big Island area. A couple trees brought down power lines when they fell.
AMHERST	7/22/2019	50	7000	A couple trees were blown down onto two separate houses by thunderstorm winds on Yahweh Drive.
AMHERST	8/1/2019	55	22500	A few trees were blown down by severe thunderstorm winds along Cedar Gate Road and High Peak Road. In addition, a barn was destroyed and a car was flipped over in this area.
LYNCHBURG	8/1/2019	50	5000	A few trees and power lines blown down by severe thunderstorm winds in Lynchburg City.
CAMPBELL	8/1/2019	55	2500	Several tree tops were snapped off by severe thunderstorm winds.
BEDFORD	8/9/2019	60	15000	Local news reported that considerable



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				damage occurred in Moneta near the Spring Valley Farm. A roof was ripped off of a barn and caused damage to a nearby structure. A horse in a field was also killed by debris from the barn.
AMHERST	8/15/2019	50	1000	A tree and several branches were blown down by severe thunderstorm winds on Route 130.
APPOMATTOX	8/19/2019	60	20000	A possible microburst blew down several trees, power lines, and power poles near the intersection of Fleshman Street and Annie Street. The thunderstorm winds also tore off a wooden roof at a baseball park on Park Lane.
BEDFORD	8/20/2019	50	500	A few large tree limbs were blown down by thunderstorm winds off Route 731.
AMHERST	8/20/2019	50	1000	One tree and a couple of large limbs were blown down by severe thunderstorm winds at Pedlar Dam.
APPOMATTOX	8/21/2019	50	500	Several tree limbs were blown down by by severe thunderstorm winds in the Pamplin area.
CAMPBELL	8/22/2019	50	500	One was tree blown down by severe thunderstorm winds on Rocky Road.
APPOMATTOX	8/23/2019	50	500	One large tree was blown down by severe thunderstorm winds on Phoebe Pond Road.
APPOMATTOX	8/23/2019	50	1000	A tree was blown down onto power lines by severe thunderstorm winds on Morning Star Road.
APPOMATTOX	9/9/2019	60	35000	Thunderstorm winds blew more than one



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
				dozen trees down in the Oakville area, particularly on Virginia Highway 26 between Oakville and Appomattox. Also, Highway 26 near Oakville was blocked going towards Nelson County. A garage in the 4000 Block of Oakville Road was damaged by thunderstorm winds. Finally, a large tree fell down on Oakville Road. Damage values are estimated.
APPOMATTOX	9/9/2019	50	1100	Thunderstorm winds blew large limbs and a tree down on Horseshoe Road. Damage values are estimated.
APPOMATTOX	9/9/2019	50	1000	Thunderstorm winds blew one tree down at Appomattox Middle School, and also one tree was blown down on Church Street. Damage values are estimated.
APPOMATTOX	9/9/2019	50	500	Thunderstorm winds blew a tree down on Route 604. Damage values are estimated.
CAMPBELL	9/9/2019	50	500	Thunderstorm winds blew one tree down in the 4000 block of Brookneal Highway. Damage values are estimated.
BEDFORD	9/11/2019	55	15000	Thunderstorm winds downed several trees, and power lines were brought down along Thrush Drive and Rocky Ford Road. Damage values are estimated.
CAMPBELL	9/11/2019	50	500	Thunderstorm winds blew a tree down on School Street in Alta Vista. Damage values are estimated.
BEDFORD	9/29/2019	50	400	Thunderstorm winds blew a couple of large limbs down along Coltons Mill Road near Big Island Highway. Damage values are estimated.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	MAGNITUDE	PROPERTY DAMAGE (\$)	DESCRIPTION
APPOMATTOX	9/29/2019	50	500	Thunderstorm winds blew a tree down on Paradise Road near the county line between Appomattox and Campbell Counties. Damage values are estimated.
CAMPBELL	9/29/2019	50	500	Thunderstorm winds blew a tree down near the intersection of Route 24 and Cardinal Lane. Damage values are estimated.
BEDFORD	10/31/2019	50	10500	Thunderstorm winds blew down multiple power lines and one tree about two miles west of Bedford.

Storm Events Database NCEI data - heavy rainfall 2014-2019

(There is no record for year 2012 and 2013)

JURISDICTION	BEGIN DATE	DESCRIPTION
CAMPBELL	7/24/2014	The official gage at Lynchburg Airport (LYH) measured 3.88 inches of rain in about 2.5 hours. It was the 2nd wettest daily total for this date and also 2nd for any July day with records dating back to 1893. The recurrence interval at the 3-hour duration for this rainfall was very close to 100-years or the 1 percent annual chance of occurrence.
BEDFORD	9/30/2016	A mudslide was reported across a portion of Route 460 near Johnson School Road.
BEDFORD	5/24/2017	The COOP observer at Big Island (BGIV2) measured 3.27 inches for 24-hours ending at 07:00 EST. This is the highest 1-day rainfall in the month of May at this site, the old record was 2.80 inches set May 30, 1971. Records date back to 1960 at this site.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	DESCRIPTION
AMHERST	6/15/2017	A storm spotter reported 3.50 inches of rain in about 2.5 hours.
CAMPBELL	2/10/2018	The COOP observer at Concord 4 SSW had a 24-hour total of 2.60 inches for the 24-hour period ending at 7 AM on the 11th. This was the highest daily rainfall total during the month of February at this location since records began in 1950. Minor flooding was reported in parts of the county.
BEDFORD	2/10/2018	The COOP observer at Bedford had a 24-hour total of 3.10 inches for the 24-hour period ending at 7 AM on the 11th. This was the highest daily rainfall total during the month of February at this location since records began in 1931. Minor flooding was reported in parts of the county.
APPOMATTOX	2/10/2018	The COOP observer at Appomattox had a 24-hour total of 2.73 inches for the 24-hour period ending at 7 AM on the 11th. This was the highest daily rainfall total during the month of February at this location since records began in 1938. An IFLOWS gage at Bent Creek (BECV2) recorded 5.13 inches for a storm total. Minor flooding was reported in parts of the county.
CAMPBELL	2/11/2018	The ASOS rain gauge at Lynchburg had a 24-hour total of 2.04 inches for the 24-hour period ending at 12 AM on the 12th. This was the 4th highest daily rainfall total during the month of February at this location since records began in 1893 and was a record for February 11th. The old record was 1.99 inches set in 1994. Minor flooding was reported around the county with some roads closed.
BEDFORD	5/17/2018	The CoCoRaHS observer at Vinton 2.6 E had 6.86 inches of rain for the 24-hours ending at 700 AM EST. This amount exceeds the 50-year recurrence interval (0.02 annual exceedance probability) for this location and duration.
LYNCHBURG	6/9/2018	Heavy rainfall of 2 to 3 inches in a few hours caused the partial collapse of a roof at a manufacturing plant in Lynchburg. About 35 employees were working inside the plant when the storm began but safely evacuated before the roof collapsed. The collapse opened up a hole in the roof of the rear of the building,



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	DESCRIPTION
		measuring about 75 foot by 100 foot. A broken water main and a partially opened roof resulted in about an inch of flooding inside the plant according to reports. A CoCoRaHS observer at Lynchburg 1.3 SSW measured 2.24 for the 24 hours ending 7AM local time and a nearby observer at Lynchburg 1.3 SSW had 2.21 inches.
LYNCHBURG	8/2/2018	A CoCoRaHS station at Lynchburg 2.5 NNW (VA-LYC-1) measured 6.00 inches for the 24-hour period ending at 800 AM EST on the 3rd. According to local mesonet stations and NWS radar most of the rain fell during intense storms over about a 3-hour period between 500 and 800 PM on August 2nd. For a 24-hour period this is roughly a 25-year rain event (.04 annual exceedance probability) but much more extreme (near 1000-year event) for the approximately 3-hour duration of the rain.
LYNCHBURG	8/2/2018	A CoCoRaHS station at Lynchburg 1.3 SSW (VA-BD-19) measured 6.05 inches for the 24-hour period ending at 330 AM EST on the 3rd. According to local mesonet stations and NWS radar most of the rain fell in intense storms during about a 3-hour period between 500 and 800 PM late afternoon and evening on August 2nd. For a 24-hour period this is roughly a 25-year rain event (.04 annual exceedance probability) but much more extreme (near 1000-year event) for the approximately 3-hour duration of the rain.
APPOMATTOX	9/1/2018	The COOP station at Appomattox, VA (APXV2) measured 2.92 inches for the 24-hour period ending 700 AM local time on September 2nd. This was the highest ever for the date (the old record was 1.30 inches in 1957) and the 11th highest ever in the month of September. Nearly continuous data back to 1938 exists at this location.
APPOMATTOX	9/1/2018	The COOP station at Appomattox (APXV2) measured 2.92 inches for the 24-hour period ending 700 AM local time on September 2nd. It was the highest rainfall for this date with records dating back to 1937.
BEDFORD	9/22/2018	The COOP site at Bedford (BEDV2) measured 3.95 inches for the



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	DESCRIPTION
		24 hours ending at 700 AM local time on the 23rd. This was the 4th highest daily rainfall recorded at this station in the month of September with rainfall records from 1893-1902, 1931-2005 and 2017-present.
CAMPBELL	10/11/2018	The CoCoRaHS site at Brookneal 2.9 E (VA-CM-10) measured 4.90 inches for 24-hour period ending at 700 AM local time, October 12, 2018.
CAMPBELL	12/14/2018	The ASOS at Lynchburg Airport (LYH) recorded a daily record for December 15th of 1.11 inches for the 24 hours ending at midnight. The old record was 0.99 inches set in 1999. Climate records for Lynchburg date back to 1893.
BEDFORD	12/14/2018	The COOP station at Big Island (BGIV2) reported 1.67 inches for the 24-hours ending at 700 AM local time which was the highest on record for December 15th. The old record was 0.95 inches in 1977. Climate records at this station exist from 1960-1985 and 2000 to present.
AMHERST	12/14/2018	The COOP station at Pedlar Dam (PDLV2) reported 1.27 inches for the 24-hours ending at 700 AM local time which was the highest on record for December 15th. The old record was 1.21 inches in 1951. Nearly continuous climate records at this station began in 1937.
CAMPBELL	12/20/2018	The record rainfall of 1.63 inches was tied at Lynchburg, VA (LYH) for December 20, tying the record first set in 1905. Official climate records for Lynchburg date back to 1893.
BEDFORD	12/20/2018	The COOP station at Big Island (BGIV2) reported 2.76 inches of rain for the 24-hours ending at 700 AM local time which was the highest on record for December 21st. The old record was 2.29 inches in 1973. It was also the highest daily precipitation recorded in the month of December. The record was 2.35 inches set December 12, 2008. Climate records at this station exist from 1960-1985 and 2000 to present.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	DESCRIPTION
CAMPBELL	12/20/2018	The COOP station at Altavista (ALTV2) reported 2.16 inches of rain for the 24-hours ending at 700 AM local time which was the highest on record for December 21st. The old record was 2.10 inches in 1973. It was also the 3rd highest daily precipitation recorded in the month of December. The record is 3.40 inches set December 29, 1958. Climate records at this station date back to 1945.
BEDFORD	5/2/2019	Rainfall of 4.5 inches in about one hour was reported.
LYNCHBURG	8/1/2019	CoCoRaHS observer (VA-LYC-1) reported 3.50 inches in 24 hours, most of which fell in several hours during the evening of August 1st.
LYNCHBURG	8/1/2019	A CoCoRaHS observer (VA-LYC-4) in Lynchburg reported 4.10 inches in 2.5 hours that fell from 715 to 945 PM local time (EDT). According to the observer the creek behind their house was the highest seen in 32 years. Per NOAA Atlas 14, the 4.10 inches in 2.5 hours is roughly a 200-year rain event (.005 annual chance occurrence).
AMHERST	8/1/2019	A CoCoRaHS observer (VA-AH-5) reported 2.70 inches of rain in several hours with the heaviest falling in 45 minutes.

Storm Events Database NCEI data - lightning 2014-2019

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
LYNCHBURG	6/21/2012	5000	A lightning strike cause a shed to catch fire. Timberlake Road was closed temporarily because of the fire. Damage values are estimated.
CAMPBELL	7/1/2012	250	A brush fire was caused by lightning on Tardy Mountain Road.
BEDFORD	5/7/2013	10000	Lightning damaged a home on the 1000 block of



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
			Glenwood Drive.
APPOMATTOX	7/24/2013	5000	Lightning strikes caused damage in two locations including a shed that was set on fire and at a private residence along Old Court House Lane.
LYNCHBURG	6/11/2014	250000	A lightning strike ignited a house fire at 509 Sussex St., Lynchburg, VA. Firefighters were able to quickly contain the flames, and there were no injuries to either the residents or the firefighters. The family of five were displaced due to the damage. Damage values are estimated.
AMHERST	8/21/2014	200000	The Lynchburg News and Advance along with the Amherst Fire and Rescue Department reported that lightning struck and sparked a fire at a home on Gun Mountain Drive near Amherst. The home was completely destroyed by the fire. Nine residents of the home were completely displaced as a result.
AMHERST	9/9/2015	50000	Lightning struck a HVAC business just northeast of the community of Madison Heights. Two 16 x 32 foot garage buildings housing the HVAC business were damaged, one of which burned to the ground and was completely destroyed. The other was partially destroyed.
CAMPBELL	6/21/2016	100	A home on St. Cloud Avenue in Lynchburg was struck by lightning blowing out a light fixture in the attic.
BEDFORD	6/23/2016	30000	Lightning caused a house on Wingfield Road in Goode to catch fire.
BEDFORD	6/23/2016	10000	Lightning caused a house on Patterson Mill Road near Bedford to catch fire.
LYNCHBURG	6/27/2016	100	Lightning struck a home on Grace Street, destroying a



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
			microwave oven.
LYNCHBURG	6/27/2016	1000	Lightning struck a power pole at the intersection of Lexington Drive and Inglewood Road.
BEDFORD	7/14/2016	0	A man was struck by lightning while walking along Highway 122. He later died from his injuries.
BEDFORD	7/26/2016	10000	A lightning strike set a two-car garage on fire.
CAMPBELL	7/26/2016	2000	A lightning strike took down two power lines.
CAMPBELL	7/26/2016	10000	A lightning strike caused major damage to the electrical components of a patrol vehicle for the Campbell County Sheriff's Office.
LYNCHBURG	7/26/2016	15000	A lightning strike caused a home to catch fire.
APPOMATTOX	5/10/2017	2500	A thunderstorm produced lightning which struck a house on Old Courthouse Road.
LYNCHBURG	7/6/2017	10000	Lightning struck a tree, causing it to fall onto a car along Edgewood Avenue.
BEDFORD	9/5/2017	5000	A lightning strike from a thunderstorm struck a tree on church property during the evening hours. Early the next morning, residual embers from the roots of the struck tree caused a small fire to occur within a nearby church building.
CAMPBELL	8/1/2018	5000	Lightning struck a residence on Riverview Drive in Altavista. Damage values are estimated.
CAMPBELL	8/12/2018	200	Lightning struck a tree along the 6500 block of Sugar Hill Road.



Appendix H: Hazard Events

JURISDICTION	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
BEDFORD	8/5/2019	3000	Lightning struck a shed and caught it on fire. The shed was a total loss.
BEDFORD	8/6/2019	15000	Lightning struck a barn and caught it on fire. The barn was completely destroyed by the fire.
APPOMATTOX	8/19/2019	10000	Lightning from a thunderstorm struck a barn on Little Cub Road and ignited a fire that completely destroyed the barn.



Appendix H: Hazard Events

Severe winter storm

Winter storm event 2010-2019

JURISDICTION/ ZONE	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
BEDFORD	2/5/2010	70000	Light to moderate moved into the county during the early morning hours on the 5th. The snow turned to a mixture of rain, freezing rain, and sleet during the afternoon, before ending as snow late at night into the day on the 6th. Snowfall accumulations of 7 to 8 inches were reported across the county. Roadways became slick, with many reports of vehicles sliding off roads across the state. The heavy snow and ice also caused the roof of a large dock at a marina at Smith Mountain Lake to collapse. As many as 22 boats, many of which were large, were damaged in the collapse.
AMHERST	2/5/2010	0	Light to moderate moved into the county during the early morning hours on the 5th. The snow turned to a mixture of snow, freezing rain, and sleet during the afternoon, before ending as snow late at night into the day on the 6th. Most of the county saw between 6 and 9 inches of snow. Roadways became slick, with many reports of vehicles sliding off roads across the state.
APPOMATTOX	2/5/2010	0	Light to moderate moved into the county during the early morning hours on the 5th. The snow turned to a mixture of snow, freezing rain, and sleet during the afternoon, before ending as snow late at night into the day on the 6th. Snowfall amounts of 5 to 7 inches were common across the northern part of the county, with lower amounts near 3 inches across southern areas. Roadways became slick, with many reports of vehicles sliding off roads across the state.
CAMPBELL	2/5/2010	0	Light to moderate moved into the county during the early morning hours on the 5th. The snow turned to a mixture of snow, freezing rain, and sleet during the afternoon, before ending as snow late at night into the day on the 6th. Most of the county saw around 5 inches



Appendix H: Hazard Events

JURISDICTION/ ZONE	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
			of snow. Roadways became slick, with many reports of vehicles sliding off roads across the state.
BEDFORD	12/16/2010	0	Snow amounts ranged from 3.0 inches near Goode to 4.0 inches at Big Island and Stewartsville. Some light sleet and freezing rain fell on the snow at the end of the event. Damage values are estimated.
AMHERST	12/16/2010	0	Snow amounts ranged from 3.5 inches near Naola to 5.0 inches at Lowesville. Some light sleet and freezing rain fell on top the snow at the conclusion of the event. Damage values are estimated.
CAMPBELL	12/16/2010	0	Snow amounts ranged from 2.0 inches at Timberlake to 3.5 inches at Brookneal. Some light sleet and freezing rain fell on top the ice. Damage values are estimated.
BEDFORD	2/19/2012	0	Snowfall totals across the county ranged from 6.0 inches in the City of Bedford to 7.4 inches near Forest.
CAMPBELL	2/19/2012	0	Snow totals across the county ranged from 5.0 inches in Rustburg to 7.7 inches in the City of Lynchburg.
AMHERST	2/19/2012	0	Snowfall totals across the county range from 6.0 inches near Elon to 7.0 inches in Amherst.
APPOMATTOX	2/19/2012	0	Snow all totals across the county ranged from 4.0 inches in Appomattox to 5.5 inches in Stonewall.
CAMPBELL	2/12/2014	50000	Snowfall totals ranged from around 9 inches across the southern part of the county to around 10 inches near Lynchburg. Freezing rain accretion occurred over the eastern part of the county where one tenth to a little over one-quarter of an inch was reported. Around 100 vehicle accidents took place and caused indirect damage as a result of the snow and ice covered roads. Damage values are estimated.
APPOMATTOX	2/12/2014	0	Snowfall amounts ranged from 8 to 10 inches across the county. Freezing rain accretion ranged from a few



Appendix H: Hazard Events

JURISDICTION/ ZONE	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
			hundredths across the western part of the county to a little over a quarter inch in the east.
AMHERST	3/16/2014	0	Various sources reported snowfall totals of around 3 inches with about 0.3 inches of sleet and then .05 inches of freezing rain toward the end of the event.
BEDFORD	2/16/2015	0	The public observed 9.5 inches of snow in Forest, while trained spotters and the public provided numerous reports of snowfall ranging from 7.0 to 9.0 inches from Big Island, Huddleston, Goode, Bedford, and Thaxton.
CAMPBELL	2/16/2015	0	A spotter observed 9.0 inches of snow 4NNE of Rustburg, while other spotters measured 8.0 inches of snow near Timberlake, Bocock, and 3NNW of Gladys. WSET Television measured 7.2 inches at the Lynchburg Airport and 9.0 inches 1WSW of Lynchburg City.
APPOMATTOX	2/16/2015	0	A spotter measured 9.0 inches of snow at Stonewall while another spotter recorded 7.0 inches of snow 2NW of Oakville.
AMHERST	2/16/2015	0	The public measured 7.0 inches of snow 2W of Elon and a trained spotter measured 7.0 inches of snow 3SW of Lowesville.
CENTRAL VIRGINIA BLUE RIDGE	2/16/2015	0	Between 4.0 and 7.5 inches was reported by multiple sources in surrounding areas.
BEDFORD	2/21/2015	0	The public measured 9.5 inches of snow at Big Island, with several reports of 7.0 to 7.5 inches of snow measured by trained spotters around Bedford. Elsewhere across the county, snowfall amounts were mostly in the 4.0 to 6.0 inch range. In addition, an ice accumulation of 0.20 inch was measured by a spotter in Bedford. There were also several reports of sleet mixing in with the snow and ice.
CENTRAL	2/21/2015	0	Between 14.0 and 15.0 inches was reported in the



Appendix H: Hazard Events

JURISDICTION/ ZONE	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
VIRGINIA BLUE RIDGE			surrounding areas.
AMHERST	2/21/2015	0	A spotter measured 11.0 inches of snow 2SW of Pera while a COOP Observer measured 10.1 inches of snow in Amherst. Elsewhere, snowfall amounts were mostly in the 5.0 to 6.0 inch range.
CAMPBELL	2/21/2015	0	The public measured 5.5 inches within the City of Lynchburg while the Campbell County Sheriff's Office measured 3.0 inches of snow near the Lynchburg Airport. Three inches of snow was also observed by a trained spotter at Concord. Elsewhere across the county, snowfall amounts were mostly less than 3.0 inches. However, ice accumulations ranged from 0.13 inch at WSET Television near Lynchburg to 0.30 inch at Altavista, as measured by a spotter.
CAMPBELL	2/25/2015	0	The public measured 7.0 inches of snow 2NNW of Altavista and 6.0 inches at Altavista. Spotters measured 6.0 inches of snow 4S of the Lynchburg Airport. Elsewhere, snowfall amounts of 4.0 to 5.0 inches were common as reported by spotters and WSET Television of Lynchburg.
BEDFORD	2/25/2015	0	A spotter measured 7.0 inches of snow at Huddleston. Elsewhere, as reported by spotters, the public, a COOP observer, and the county Fire Department, snowfall amounts ranged from 4.0 inches near Forrest to 3.0 inches of snow 2W of the D-Day Memorial.
AMHERST	2/26/2015	0	Trained spotters and the public measured snowfall amounts ranging from 5.0 inches at Madison Heights, 2NE of Madison Heights, and 4N Pleasant View to 3.0 inches 1SW of Falconverville.
APPOMATTOX	2/26/2015	0	Trained spotters measured snowfall ranging from 5.0 inches near Stonewall, 5NNW of Hixburg and near Appomattox to 4.0 inches near Evergreen.



Appendix H: Hazard Events

JURISDICTION/ ZONE	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
CENTRAL VIRGINIA BLUE RIDGE	3/5/2015	0	Storm total snow between 5.0 and 8.0 inches was reported in surrounding areas.
BEDFORD	1/22/2016	0	Snowfall amounts between 8 and 12 inches were observed across several locations throughout the county. The highest accumulation report was recieved out of the Forest area, where 12.0 inches of snow was measured. A brief period of sleet was also reported during this storm.
CAMPBELL	1/22/2016	0	Snowfall amounts between 8 and 12 inches were observed across several locations throughout the county. The highest accumulation report was recieved out of the Rustburg area, where 12.0 inches of snow was measured. A brief period of sleet was also reported during this storm.
AMHERST	1/22/2016	0	Snowfall amounts between 9 and 11 inches were observed across several locations throughout the county. The highest accumulation report was recieved out of the Amherst area, where 11.0 inches of snow was measured. A brief period of sleet was also reported during this storm.
APPOMATTOX	1/22/2016	0	Snowfall amounts between 9 and 12 inches were observed across several locations throughout the county. The highest accumulation report was recieved out of the Appomattox area, where 11.2 inches of snow was measured. A brief period of sleet was also reported during this storm.
BEDFORD	2/14/2016	0	Snowfall amounts between 5 to 9 inches were observed across several locations in the county. The highest accumulation was in the town of Bedford where 11 inches was measured. Moderate post frontal winds combined with likely under reported icing contributed to more than 1,600 customers in the county losing power.
CAMPBELL	2/14/2016	0	Snowfall amounts between 3 to 8 inches were observed



Appendix H: Hazard Events

JURISDICTION/ ZONE	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
			across several locations in the county. The highest accumulation was in the Concord area where 8 inches was measured. A report of a quarter of an inch of freezing rain was also reported in Rustburg. Strong winds after the storm caused 305 customers to lose power in the City of Lynchburg.
AMHERST	2/14/2016	0	Snowfall amounts between 5 to 8 inches were observed across several locations in the county. The highest accumulation was in the Oronco area where 7.6 inches was measured. Strong winds after the storm caused 268 power outages in the county.
APPOMATTOX	2/14/2016	0	Four to six inches of snow along with a quarter inch of ice accretion was reported across the county. This contributed to several accidents and disabled vehicles. On Route 460 a car veered off the road and overturned. All 5 passengers were taken to the hospital for injuries; two adults, and three children.
CENTRAL VIRGINIA BLUE RIDGE	3/3/2016	0	A trained spotter reported a storm total of 5 inches.
BEDFORD	1/6/2017	0	Snowfall amounts between 5 and 9 inches were observed across several locations throughout the county. The highest accumulation report was received out of the Huddleston area, where 9.0 inches of snow was measured.
CAMPBELL	1/6/2017	0	Snowfall amounts between 6 and 8 inches were observed across several locations throughout the county. The highest accumulation report was received out of the Rustburg area, where 8.0 inches of snow was measured.
APPOMATTOX	1/6/2017	0	Snowfall amounts between 6 and 10 inches were observed across several locations throughout the county. The highest accumulation report was received out of the Appomattox area, where 9.3 inches of snow



Appendix H: Hazard Events

JURISDICTION/ ZONE	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
			was measured.
AMHERST	1/6/2017	0	Snowfall amounts between 4 and 6 inches were observed across several locations throughout the county.
CAMPBELL	12/8/2017	10000	Snowfall amounts ranged from around two inches near Lynchburg to around four inches near Brookneal to around six inches near Gladys. Minor power outages occurred thanks to snow and ice weighted trees and limbs falling on power lines. Damage values are estimated.
APPOMATTOX	12/8/2017	0	Snowfall amounts ranged from around four inches near Evergreen to around five inches near Appomattox.
APPOMATTOX	1/17/2018	0	Snowfall amounts between 5 to 6 inches were observed across several locations in the county. The highest accumulation was near the city of Appomattox where 5.6 inches was measured. 118 traffic accidents were reported within the Appomattox division of the Virginia State Police which encompasses the City of Lynchburg, Campbell, Amherst and Appomattox counties. 105 of these accidents involved property damage and 13 involved injuries.
CAMPBELL	1/17/2018	0	Snowfall amounts between 4 to 6 inches were observed across several locations in the county. The highest accumulation was in the Evington area where 5.5 inches was measured. 118 traffic accidents were reported within the Appomattox division of the Virginia State Police which encompasses the City of Lynchburg, Campbell, Amherst and Appomattox counties. 105 of these accidents involved property damage and 13 involved injuries.
CENTRAL VIRGINIA BLUE RIDGE	3/12/2018	0	Snowfall totaled up to 6.5 at Wintergreen.



Appendix H: Hazard Events

JURISDICTION/ ZONE	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
CENTRAL VIRGINIA BLUE RIDGE	3/20/2018	0	A wintry mix occurred on the 20th before a round of heavier snow developed on the morning of the 21st. Snowfall was estimated to be between 4 and 8 inches based on observations nearby.
AMHERST	3/20/2018	0	Snowfall amounts from across the county include 1.0 inch at Clifford, 3.0 inches two miles southeast of Forks of Buffalo, two miles west-southwest of New Glasgow, and one mile northeast of Madison Heights, 4.0 inches four miles north of Peasant View, 4.2 inches three miles west of Pleasant View, and 4.5 inches three miles north of Madison Heights.
BEDFORD	3/20/2018	0	Snowfall totals across the county include 2.2 inches five miles north of Bedford, 3.0 inches at Bedford, 3.3 inches at Forest, 3.6 inches two miles west-southwest of Boonsboro, 3.8 inches four miles south of Montvale, 4.0 inches five miles west-southwest of Sedalia and at Goodview, 4.2 inches at Stewartsville, 4.3 inches one mile north-northwest of Coleman Falls and four miles east-northeast of Moneta, 4.8 inches four miles south-southeast of Beford, 5.0 inches three miles east of Thaxton and four miles south-southeast of Thaxton, 5.5 inches six miles north-northeast of Thaxton, and 6.5 inches one mile northeast of Bedford.
CENTRAL VIRGINIA BLUE RIDGE	11/15/2018	0	Widespread ice accretion of around a half inch occurred along the higher elevations of the Central Virginia Blue Ridge. In addition, between 1 and 2 inches of snow and sleet accumulated.
BEDFORD	12/9/2018	0	Snowfall accumulations ranged from 10.5 inches at Bedford to 16.3 inches about two miles west-southwest of Chamblissburg.
AMHERST	12/9/2018	0	Snowfall accumulations ranged from 11.0 inches about three miles east-southeast of Amherst to 15.4 inches at Pedlar Dam.
APPOMATTOX	12/9/2018	0	Snowfall accumulations ranged from 11.0 inches about



Appendix H: Hazard Events

JURISDICTION/ ZONE	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
			three miles west-northwest of Evergreen to 13.4 inches at Appomattox.
CAMPBELL	12/9/2018	0	Snowfall accumulations ranged from 11.0 inches about two miles east of Forest to 15.0 inches at Rustburg. Lynchburg received 11.7 inches of snow, which is the third highest storm total in the month of December since records began in 1893. It is also the earliest in the winter season that an amount this high has ever been recorded.
CENTRAL VIRGINIA BLUE RIDGE	12/9/2018	0	Snowfall amounts ranged from around 8 inches in the northern portion of the zone to upwards of 20 inches in the southern portion of the zone. A local maximum of 21.0 inches was measured near the Wintergreen Resort.
BEDFORD	1/12/2019	0	A winter storm brought mainly freezing rain to the county, where ice accumulations ranged from 0.2 to 0.33 inches thick. In addition, snow accumulations ranged from 2.0 to locally 5.0 inches.
CAMPBELL	1/12/2019	0	A winter storm brought mainly freezing rain to the county, where ice accumulations were as much as 0.25 inches thick. Snow amounts, which were mixed with sleet in some spots, were around 1.0 inch.
AMHERST	1/12/2019	0	Numerous reports of 3.0 to 4.0 inches of snow were observed by a variety of sources across the county. A few observers also witnessed very light amounts of sleet and icing from freezing rain.
APPOMATTOX	1/12/2019	0	A winter storm brought a combination of freezing rain, sleet and snow to the county. Ice accumulations from freezing rain were around 0.2 inches thick, while sleet accumulations were around 0.5 inches. Snow accumulations ranged from 1.8 to 2.0 inches.
BEDFORD	2/19/2019	0	A winter storm produced freezing rain, sleet and snow in Bedford county. Ice from freezing rain reached a thickness of 0.25 inches and sleet accumulated to a depth of 2 inches, while snow reports ranged from 1 to



Appendix H: Hazard Events

JURISDICTION/ ZONE	BEGIN DATE	PROPERTY DAMAGE (\$)	DESCRIPTION
			4 inches across the county. Over 4,100 people in Bedford county were without power due to downed trees and power lines.
APPOMATTOX	2/20/2019	0	A winter storm created freezing rain and snow in Appomattox county. Ice from freezing rain reached a thickness of 0.25 inches, while snow reports ranged from 1 to 3 inches across the county.
AMHERST	2/20/2019	0	A winter storm produced sleet and snow in Amherst county. Sleet accumulation ranged from trace amounts to 0.5 inches, while snow reports ranged from 1.3 to 3.6 inches across the county. At one point during the storm, over 3,300 customers were without power in Amherst county.
CENTRAL VIRGINIA BLUE RIDGE	3/21/2019	0	Snowfall accumulations of 4 to 8 inches were reported, with 8.0 inches measured near Wintergreen Resort.



Appendix H: Hazard Events

Tornado

This table includes descriptions of major tornado events that have touched down in CVPDC. Events have been broken down by the date of occurrence and when available, by individual community descriptions. When no community specific description is available, the general description should be used as representing the entire planning area.

Historic Occurrences of Tornadoes in Central Virginia PDC (1950-2019)

County	Date	F Scale	Property Damage (\$)	Description
Appomattox	2/1/1951	F1	2,500	
Amherst	5/15/1976		2,500	
Campbell	3/21/1984	F1	250,000	
Campbell	6/21/1989	F0	0	
Amherst	7/9/1990	F0	2,500	
Bedford	6/9/1996	F1	0	
Bedford	7/15/1996	F1	90,000	
Bedford	7/15/1996	F2	140,000	
Campbell	4/17/2000	F0	0	
Bedford	4/28/2002	F1	1,200,000	Destroyed 4 businesses and damaged 25 homes, 58 businesses, several dozen vehicles, and one church.
Bedford	4/28/2002	F2	3,000,000	Injured 1 person, destroyed 7 homes, 3 businesses, and about two dozen farm buildings. The tornado damaged about 129 other homes, 39 businesses, and a tractor trailer. Numerous trees were toppled.
Campbell	4/28/2002	F2	3,000,000	Injured 11 people, destroyed 15 homes, 3 businesses, and a church. The tornado damaged over 200 other homes, six businesses, two churches, 20 recreational vehicles, and several automobiles. Numerous trees were toppled, Some of the trees landed on homes, and two landed on vehicles.
Bedford	9/17/2004	F2	0	Damage to trees. A few homes suffered only



Appendix H: Hazard Events

County	Date	F Scale	Property Damage (\$)	Description
				minor damage to shingles and roofs, mainly due to trees falling on them.
Campbell	9/17/2004	F1	0	Caused extensive tree damage.Minor damage to homes, mainly shingles and eaves.
Campbell	9/17/2004	F1	0	Large trees were snapped off or uprooted, but only minor damage occurred to sheds.
Appomattox	5/8/2008	EF1	25,000	Numerous trees were downed along and near the path of the tornado. Two houses were damaged, along with two other smaller structures. The damage from the tornado was observed within a larger area of straight-line wind damage.
Campbell	7/17/2009	EF0	20,000	The tornado downed and snapped numerous trees.
Campbell	2/24/2016	EF0	10,000	The tornado downed several trees.
Appomattox	2/24/2016	EF3	11,200,000	The fatality and all the injuries occurred in Evergreen, when the tornado was at its greatest intensity. Thirty structures were completely destroyed and 160 others were damaged, mostly in the Evergreen area. There were also 7 injuries and 1 fatality from this tornado. Numerous trees were snapped and uprooted.
Bedford	5/5/2017	EF0	15,000	It uprooted and snapped multiple large trees and produced damage to the roof and windows of a single dwelling.
Bedford	4/15/2018	EF1	200,000	This tornado caused significant damage to the roof of one home, and it also caused damage to an adjacent barn and outbuilding. About fifty mature trees were either snapped or uprooted.
Campbell	4/15/2018	EF1	100,000	A tornado touched down about five miles east-southeast of Rustburg near Carwile Road at 5:56 PM EST. Several trees were uprooted or snapped during the first moments, but the tornado intensified along New Chapel Road. A roof was blown off a garage, and a manufactured home was moved off its



Appendix H: Hazard Events

County	Date	F Scale	Property Damage (\$)	Description
				foundation. In addition, a metal roof from a large shed was also peeled off by the tornado. The estimated maximum winds reached 90 MPH. By 5:59 PM EST, the tornado lifted just south of the intersection of New Chapel Road and Bethany Road.
Campbell	4/15/2018	EF2	6,100,000	The tornado uprooted trees, damaged multiple roofs from homes, damaged several businesses, and flipped several cars. A total of 28 buildings suffered damage, and five of those buildings were completely destroyed.
Lynchburg	4/15/2018	EF2	9,600,000	The tornado uprooted trees and caused notable damage to 332 private buildings, and 34 of those buildings were condemned due to the damage. It also damaged numerous power lines and transformers. Two people were injured.
Amherst	4/15/2018	EF3	4,300,000	A total of 166 homes suffered damage, and 22 of those homes were considered a total loss. A motor home was carried about thirty feet and tipped over. The hardest hit locations were along Nottaway Drive and Deerfield Drive. Seven people were injured and taken to the hospital from Elon. As the tornado continued north-northeastward out of Elon, it snapped or uprooted hundreds of trees and caused more minor roof damage to homes.
Amherst	4/15/2018	EF0	50,000	It tracked toward the northwest and lifted at 6:41 PM EST about four miles west-northwest of Lowesville. The tornado only uprooted trees during its time on the ground.
Bedford	5/19/2018	EF1	25,000	Approximately 50 trees were snapped or uprooted but no damage to any structures was noted.
Bedford	4/19/2019	EF1	75000	The tornado touched near Patterson Mill Road, about 2.5 miles north of Thaxton, VA. The tornado stayed on the ground for three



Appendix H: Hazard Events

County	Date	F Scale	Property Damage (\$)	Description
				minutes, heading nearly due north, uprooting or snapping trees in its path, one of which crushed a storage shed. The tornado destroyed one outbuilding off Centennial Road before dissipating. Damage values are estimated.
Campbell	5/11/2019	EF1	65000	An EF-1 tornado touched down about 5.5 miles southwest of Red House at 3:35 PM EST on May 11, 2019. The tornado traveled 4.1 miles and grew up to 275 yards wide along its path. Winds inside the tornado reached 90-100 MPH, which caused minor damage to three homes and severely damaged or destroyed four outbuildings. In addition, the tornado overturned one modular home and uprooted or snapped numerous trees. By 3:46 PM EST, the tornado lifted about 1.5 miles southwest of Red House.

Source: Storm Events Database



Appendix H: Hazard Events

Hazardous materials incident

Table HazMat incidents in CVPDC (1990 - 2019)

Incident County	Date of Incident	Mode of Transportation	HazMat Code	Damages	Fatalities	Injuries	Incident Route
Bedford	2/26/1990	Highway	3	32	0	0	
Lynchburg	6/26/1990	Highway	8	0	0	0	3335 OLD FELLOWS RD
Campbell	6/28/1990	Highway	6.1	136	0	0	ROUTE 29
Lynchburg	7/20/1990	Rail	8	25	0	0	ROUTE 2
Lynchburg	8/1/1990	Rail	8	10	0	0	ROUTE 2
Campbell	9/17/1990	Highway	6.1	125	0	0	ROUTE 29 N
Lynchburg	1/24/1991	Highway	3	0	0	0	1 MILLERACE ST
Lynchburg	4/26/1991	Highway	3	0	0	0	MURRAY PLACE
Lynchburg	10/27/1991	Highway	3	450	0	0	MURRAY PLACE - TERMINAL LOCATI
Lynchburg	12/17/1991	Highway	3	50	0	0	NAVAL RESERVE RD
Lynchburg	2/19/1992	Highway	3	0	0	0	3335 OLD FELLOW ROAD
Bedford	6/30/1992	Highway	3	80	0	0	RT 24 AND O'NEIL



Appendix H: Hazard Events

Incident County	Date of Incident	Mode of Transportation	HazMat Code	Damages	Fatalities	Injuries	Incident Route
							DRIVE
Lynchburg	8/14/1992	Highway	7	0	0	0	MT ATHOS ROAD
Lynchburg	8/24/1992	Highway	3	10	0	0	4640 MURRAY PLACE
Lynchburg	1/19/1993	Highway	8	5	0	0	4640 MURRAY PL
Lynchburg	3/9/1993	Rail	8	0	0	0	
Lynchburg	4/23/1993	Highway	3	5	0	0	4640 MURRAY PLACE
Lynchburg	5/24/1993	Highway	2.3	38650	0	0	9TH STREET
Lynchburg	6/10/1993	Highway	8	115	0	0	3600 CANDLERS MTN RD
Lynchburg	10/5/1993	Highway	8	0	0	0	4640 MURRAY PL
Appomattox	10/18/1993	Highway	8	125	0	0	200 12TH STREET
Lynchburg	1/18/1994	Highway	3	360	0	0	3106 ODD FELLOWS
Lynchburg	2/1/1994	Highway	3	375	0	0	3106 ODD FELLOWS ROAD
Lynchburg	2/15/1994	Highway	3	405	0	0	3106 ODD



Appendix H: Hazard Events

Incident County	Date of Incident	Mode of Transportation	HazMat Code	Damages	Fatalities	Injuries	Incident Route
							FELLOW ROAD
Lynchburg	2/28/1994	Rail	2.2	0	0	0	
Lynchburg	3/20/1994	Highway	8	900	0	0	3106 ODD FELLOWS ROAD
Amherst	3/27/1994	Highway	2	15	0	0	ROUTE 29
Lynchburg	5/31/1994	Highway	3	0	0	0	MAYFLOWER DRIVE
Bedford	7/11/1994	Highway	3	0	0	0	UNKNOWN
Lynchburg	7/19/1994	Highway	3	50	0	0	4640 MURRAY PLACE
Bedford	9/16/1994	Highway	8	120	0	0	UNKNOWN
Campbell	11/8/1994	Highway	8	0	0	0	RT I-29 NORTH
Bedford	1/7/1995	Highway	3	56284	0	0	RT 122
Lynchburg	6/29/1995	Highway	2.1	913	0	0	109 HIGH VIEW PLACE
Bedford	8/11/1995	Highway	3	0	0	0	
Lynchburg	9/22/1995	Highway	4.1	25	0	0	TIMERLAK E RD
Lynchburg	10/31/1995	Highway	9	0	0	0	3301 MAYFLOWER



Appendix H: Hazard Events

Incident County	Date of Incident	Mode of Transportation	HazMat Code	Damages	Fatalities	Injuries	Incident Route
							DRIVE
Lynchburg	11/9/1995	Highway	8	0	0	0	3301 MAYFLOWER DRIVE
Bedford	1/30/1996	Highway	9	2530	0	0	ROUTE 122
Lynchburg	2/15/1996	Rail	2.1	0	0	0	CONCORD TURNPIKE
Lynchburg	3/7/1996	Highway	8	25	0	0	WOODALL RD
Amherst	5/2/1996	Highway	9	0	0	0	
Lynchburg	5/9/1996	Highway	8	25	0	0	3335 ODD FELLOWS ROAD
Lynchburg	7/1/1996	Highway	9	0	0	0	3301 MAYFLOWER DR
Amherst	6/17/1997	Highway	3	20	0	0	ROUTE 29 NORTH
Bedford	7/11/1997	Highway	9	0	0	0	
Lynchburg	10/18/1997	Rail	2.2	0	0	0	5100 WOODALL ROAD
Lynchburg	2/2/1998	Highway	3	0	0	0	5235 WOODALL ROAD
Amherst	2/26/1998	Highway	8	0	0	0	RT 534
Lynchburg	3/31/1998	Rail	3	2713000	0	0	KEMPER



Appendix H: Hazard Events

Incident County	Date of Incident	Mode of Transportation	HazMat Code	Damages	Fatalities	Injuries	Incident Route
							STREET
Bedford	7/31/1998	Highway	2	30	0	0	PEPPERS FERRY ROAD
Bedford	3/5/1999	Highway	3	2000	0	0	
Lynchburg	3/30/1999	Rail	3	0	0	0	5100 WOODALL RD
Bedford	7/14/1999	Highway	8	125	0	0	2B CORPORATE RD
Bedford	7/28/1999	Highway	8	0	0	1	
Lynchburg	1/27/2000	Highway	2	1000	0	0	ADAMS STREET UPPER BASIN
Bedford	1/19/2001	Highway	3	0	0	1	US501
Bedford	4/19/2001	Highway	8	0	0	0	
Lynchburg	5/31/2001	Rail	8	0	0	0	MP 172
Campbell	6/5/2001	Highway	3	820	0	0	HWY 29 S
Lynchburg	9/18/2001	Highway	2	300	0	0	CONCORD TURNPIKE
Appomattox	9/27/2001	Highway	3	0	0	0	US 460
Lynchburg	5/1/2002	Highway	7	0	0	0	2016 MT-ATHOS ROAD
Bedford	7/8/2002	Highway	3	543000	0	0	ROUTE 640 E



Appendix H: Hazard Events

Incident County	Date of Incident	Mode of Transportation	HazMat Code	Damages	Fatalities	Injuries	Incident Route
Amherst	11/1/2002	Highway	8	375	0	0	118 ENTERPRISE DR
Lynchburg	4/2/2003	Highway	3	0	0	0	3301 MAYFLOWER DRIVE
Amherst	4/16/2003	Highway	8	365	0	0	118 ENTERPRISE DR
Campbell	5/13/2003	Highway	2.2	102030	0	0	RT 711
Lynchburg	6/16/2003	Highway	3	390	0	0	3416 CANDLERS MTN RD
Lynchburg	11/17/2003	Highway	3	1050	0	0	
Lynchburg	12/10/2003	Highway	3	7695	0	0	200 S DURHAM ST
Lynchburg	6/25/2004	Highway	8	0	0	0	
Amherst	8/13/2004	Highway	8	375	0	0	118 ENTERPRISE DR
Lynchburg	1/16/2005	Rail	9	1000	0	0	5100 WOODALL ROAD MILEPOST 172
Lynchburg	1/31/2005	Highway	2.2	515	1	0	Route 800 just off route 460
Lynchburg	8/2/2005	Highway	3	525	0	0	20722



Appendix H: Hazard Events

Incident County	Date of Incident	Mode of Transportation	HazMat Code	Damages	Fatalities	Injuries	Incident Route
							TIMBERLAKE RD STEEL
Lynchburg	10/24/2005	Highway	3	0	0	0	
Lynchburg	1/3/2006	Highway		0	0	0	5235 WOODALL RD
Bedford	1/12/2006	Highway	3	0	0	0	1070 OIL TERMINAL ROAD
Bedford	2/12/2006	Highway	3	0	0	0	1070 OIL TERMINAL ROAD
Lynchburg	4/14/2006	Highway	3	0	0	0	5235 WOODALL RD
Lynchburg	6/19/2006	Highway	3	0	0	0	5235 WOODALL RD
Lynchburg	12/18/2006	Highway	3	0	0	0	5235 WOODALL RD
Amherst	1/30/2007	Highway	8	0	0	0	118 ENTERPRISE DRIVE
Bedford	6/5/2008	Highway	3	0	0	0	1070 Oil Terminal Rd.
Lynchburg	11/21/2008	Highway	2	0	0	0	3301 MAYFLOWER DR



Appendix H: Hazard Events

Incident County	Date of Incident	Mode of Transportation	HazMat Code	Damages	Fatalities	Injuries	Incident Route
Lynchburg	6/18/2009	Highway	2.1	0	0	0	5235 WOODALL RD
Amherst	1/2/2010	Highway	2.1	100000	0	0	ROUTE 60 WEST AMHERST VA
Bedford	5/26/2010	Highway	2	0	0	0	
Bedford	10/14/2010	Highway	3	582700	0	0	WILKERSON MILL ROAD AND RT 460
Lynchburg	4/12/2011	Highway	3	17000	0	0	1505 RUTHERFORD ST
Lynchburg	7/19/2011	Highway	2	0	0	0	3428 ODD FELLOWS RD
Lynchburg	3/23/2012	Rail	8	0	0	0	
Lynchburg	5/23/2012	Highway	2	0	0	0	3428 ODD FELLOWS ROAD
Bedford	5/28/2012	Highway	3	567000	0	0	
Lynchburg	2/8/2013	Highway	3	8500	0	0	
Lynchburg	7/18/2013	Highway	3	0	0	0	3428 ODD FELLOWS ROAD
Bedford	11/13/2013	Highway	3	2500	0	0	4180 Rocky Ford Rd



Appendix H: Hazard Events

Incident County	Date of Incident	Mode of Transportation	HazMat Code	Damages	Fatalities	Injuries	Incident Route
Lynchburg	4/30/2014	Rail	3	2280000	0	0	
Lynchburg	3/15/2015	Rail	9	2500	0	0	
Lynchburg	6/24/2015	Highway	3	0	0	0	3428 ODD FELLOW ROAD
Lynchburg	6/30/2015	Highway	8	0	0	0	260 Fastener Dr
Lynchburg	12/4/2015	Highway	3	0	0	0	3428 ODD FELLOWS ROAD
Lynchburg	1/28/2016	Highway	8	2000	0	0	3428 ODD FELLOWS ROAD
Lynchburg	6/23/2016	Highway	3	4000	0	0	4630 Murray Place
Lynchburg	8/23/2016	Highway	3	3000	0	0	22290 TIMBERLAKE RD
Bedford	10/3/2016	Highway	9	7500	0	0	11080 East Lynchburg -Salem Tur
Bedford	5/24/2017	Highway	3	130188	0	0	10700 IL TERMINAL RD HWY 460W
Lynchburg	9/11/2017	Highway	3	4500	0	0	
Lynchburg	4/3/2018	Highway	6.1	2000	0	0	3428 ODD FELLOWS



Appendix H: Hazard Events

Incident County	Date of Incident	Mode of Transportation	HazMat Code	Damages	Fatalities	Injuries	Incident Route
							ROAD
Lynchburg	4/23/2018	Highway	8	0	0	0	5235 WOODALL RD
Lynchburg	6/22/2018	Highway	5.1	0	0	0	5235 WOODALL RD
Lynchburg	7/10/2018	Highway	3	0	0	0	3428 ODD FELLOWS ROAD
Lynchburg	1/24/2019	Air	3	0	0	0	3321 ODD FELLOWS RD



Appendix I: Mitigation Funding Sources

Appendix I: Mitigation Funding Sources

Funding Opportunity	Agency	Name	More Information
PDM	FEMA	Predisaster Mitigation Program	https://www.fema.gov/pre-disaster-mitigation-grant-program
HMGP	FEMA	Hazard Mitigation Grant Program	https://www.fema.gov/hazard-mitigation-grant-program
FMA	FEMA	Flood Mitigation Assistance Program	https://www.fema.gov/flood-mitigation-assistance-grant-program
RFC	FEMA	Repetitive Flood Claims Program	https://www.fema.gov/repetitive-flood-claims-grant-program-fact-sheet
BRIC	FEMA	Building Resilient Infrastructure and Communities Grant Program	https://www.fema.gov/drra-bric
NDSP	FEMA/ DCR	Dam Safety, Flood Prevention and Protection Assistance Fund	https://www.fema.gov/national-dam-safety-program , https://www.dcr.virginia.gov/dam-safety-and-floodplains/
HHPD	FEMA/ DCR	High Hazard Potential Dam Grants	https://www.dcr.virginia.gov/dam-safety-and-floodplains/dsfpm-grants
AFG	FEMA	Assistance to Firefighters Grant - Equipment and Training	https://www.fema.gov/assistance-firefighters-grant
FP&S	FEMA	Fire Prevention and Safety Grant - Reduce injury and death among high-risk populations	https://www.fema.gov/fire-prevention-safety-grants
HSNTP and CTG	FEMA	Homeland Security National Training Program and Continuing Training Grants	https://www.grants.gov/web/grants/view-opportunity.html?oppld=327555
EMPG-S	FEMA	Emergency Management Performance	https://www.fema.gov/media-library/assets/documents/187029



Appendix I: Mitigation Funding Sources

Funding Opportunity	Agency	Name	More Information
		Grant COVID-19 Supplemental	
SFCP	USACE	Small Flood Control Projects	https://www.mvp.usace.army.mil/Media/Fact-Sheets/Fact-Sheet-Article-View/Article/587968/fact-sheet-09-small-flood-control-projects/
FPMS	USACE	Floodplain Management Services Program	https://www.nae.usace.army.mil/missions/public-services/flood-plain-management-services/
AERP	USACE	Aquatic Ecosystem Restoration Projects	https://www.nae.usace.army.mil/Missions/Public-Services/Continuing-Authorities-Program/Section-206/
WRDA	USACE	Water Resources Development Act - Planning and Technical Assistance	https://www.nae.usace.army.mil/Missions/Public-Services/Planning-Assistance-to-States/
PHEP	CDC	Public Health Emergency Preparedness	https://www.cdc.gov/cpr/readiness/phep.htm
SAFECOM	DHS	Maintaining interoperable networks	https://www.cisa.gov/publication/emergency-communications-grant-guidance-documents
CESER	DOE	Energy Assurance Planning and Cybersecurity	https://www.energy.gov/ceser/state-and-local-energy-assurance-planning
LWCF	DOI/DCR	Land and Water Conservation Fund Grants	https://www.dcr.virginia.gov/recreational-planning/lwcf
CESFP	DOJ	Coronavirus Emergency Supplemental Funding Program	https://bja.ojp.gov/funding/opportunities/bja-2020-18553?utm_medium=email&utm_source=govdelivery
CRISI	DOT	Consolidated Rail Infrastructure and Safety Improvements	https://railroads.dot.gov/grants-loans/competitive-discretionary-grant-programs/consolidated-rail-infrastructure-and-safety-2
DMTA	EDA	Disaster Mitigation and	https://www.eda.gov/funding-opportunities/



Appendix I: Mitigation Funding Sources

Funding Opportunity	Agency	Name	More Information
		Technical Assistance Grants	
DWSRF	EPA/V DH	Drinking Water State Revolving Fund	https://www.epa.gov/dwsrf , https://www.vdh.virginia.gov/drinking-water/financial-construction-assistance-programs/
CWSRF	EPA/DE Q	Clean Water State Revolving Fund	https://www.epa.gov/cwsrf ; https://www.deq.virginia.gov/Programs/Water/CleanWaterFinancingAssistance/Wastewater.aspx
AIP	FAA	Airport Improvement Program	https://www.faa.gov/airports/aip/2020_aip_grants/
ECP	Farm Service Agency (FSA)	Emergency Conservation Program	https://www.fsa.usda.gov/programs-and-services/conservation-programs/emergency-conservation/index
TAP	FSA	Tree Assistance Program	https://www.fsa.usda.gov/programs-and-services/disaster-assistance-program/tree-assistance-program/index
HPP	HHS	Hospital Preparedness Program	https://www.phe.gov/Preparedness/planning/hpp/Pages/default.aspx
CDBG	HUD	Community Development Block Grant Program	https://www.hudexchange.info/programs/cdbg/
HDBE	National Science Foundation	Human, Disasters, and the Built Environment Grants	https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13353
WFPO	NRCS	Watershed and Flood Prevention Operations Program	https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/landscape/wfpo/?cid=nrcs143_008271
WSP	NRCS	Watershed Surveys and Planning	https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/wsp/
WR	NRCS	Watershed Rehabilitation	https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/wr/



Appendix I: Mitigation Funding Sources

Funding Opportunity	Agency	Name	More Information
		(Dam Rehabilitation)	
CFDLGP	Rural Development (RD)	Community Facilities Direct Loan and Grant Program	https://www.rd.usda.gov/programs-services/community-facilities-direct-loan-grant-program
SFHRLG	RD	Single Family Housing Repair and Loan Grants	https://www.rd.usda.gov/programs-services/single-family-housing-repair-loans-grants
Community Facilities	USDA	Grants for essential community facilities in rural areas and towns up to 20,000 in population.	https://www.rd.usda.gov/programs-services/community-facilities-direct-loan-grant-program
HSGP	VDEM	Homeland Security Grant Program	https://www.vaemergency.gov/job/homeland-security-grant-program-hsgp/



Appendix J: Mitigation Progress

Appendix J: Mitigation Progress

The Central Virginia PDC Hazard Mitigation Plan, while officially an update to the 2013 Region 2000 Hazard Mitigation Plan, was developed as though a first pre-disaster evaluation, planning, and strategy development process. The expanded stakeholder participation, Hazard Identification and Risk Assessment (HIRA), vulnerability analysis, locality and regional capability assessment, and establishment of regional and unique locality mitigation strategies tailored to local needs were all developed during this mitigation planning process and did not build upon the 2013 mitigation plan. Further, no designated or recorded implementation or maintenance actions had taken place regarding any element of the 2013 Mitigation Plan. Finally, this Hazard Mitigation Plan was developed through a broader stakeholder group, most of whom were not involved in the last mitigation process. As such, a detailed evaluation of the past plan was not incorporated in this Plan. It should be noted that confirmation with FEMA to account for this process was sought and received.

The Central Virginia PDC Hazard Mitigation 2020 Update incorporates a comprehensive Implementation and Maintenance program. This includes a process to monitor implementation activities, including integration into local and regional planning documents and departmental processes. The monitoring and capturing of mitigation activities will be accomplished through dedicated program meetings, at least two per year. A strategy matrix and review process will be used, and activities will be tracked utilizing the following evaluation format. Integration of this continued program monitoring will provide a ready format for any necessary amendments and review for the regional mitigation plan update.

Jurisdiction	Mitigation Goal(s) and Objective(s)	Mitigation Action	Complete?	Progress

Central Virginia Planning District
Commission Hazard Mitigation Plan 2020

