

Appendix A: Application Form for Grant Requests for All Categories

Virginia Department of Conservation and Recreation
Virginia Community Flood Preparedness Fund Grant Program

Name of Local Government:

Town of Clintwood

Category of Grant Being Applied for (check one):

- Capacity Building/Planning
 Project
 Study

NFIP/DCR Community Identification Number (CID) #510051-DCR1

If a state or federally recognized Indian tribe, Name of tribe Not Applicable

Name of Authorized Official: Danny Lambert, Mayor

Signature of Authorized Official: Danny Lambert 04/05/2022
Date

Mailing Address (1): 248 Main Street

Mailing Address (2): Not Applicable

City: Clintwood State: VA Zip: 24228

Telephone Number: 276.926.8383 Cell Phone Number: 276.393.3009

Email Address: dmlambert4956@gmail.com

Contact Person (If different from authorized official): Judy Steele

Mailing Address (1): See Above

Mailing Address (2): See Above

City: See Above State: _____ Zip: _____

Telephone Number: See Above Cell Phone Number: Not Available

Email Address: jsteele_townofclintwood@verison.net

Is the proposal in this application intended to benefit a low-income geographic area as defined in the Part 1 Definitions? Yes No

- Refer to Appendix III – MHI & Distressed Communities Documentation

Categories (select applicable project):

Project Grants (Check All that Apply) Not Applicable

- Acquisition of property (or interests therein) and/or structures for purposes of allowing floodwater inundation, strategic retreat of existing land uses from areas vulnerable to flooding; the conservation or enhancement of natural flood resilience resources; or acquisition of structures, provided the acquired property will be protected in perpetuity from further development.
- Wetland restoration.
- Floodplain restoration.
- Construction of swales and settling ponds.
- Living shorelines and vegetated buffers.
- Structural floodwalls, levees, berms, flood gates, structural conveyances. Storm water system upgrades.
- Medium and large scale Low Impact Development (LID) in urban areas.
- Permanent conservation of undeveloped lands identified as having flood resilience value by *ConserveVirginia* Floodplain and Flooding Resilience layer or a similar data driven analytic tool.
- Dam restoration or removal.
- Stream bank restoration or stabilization.
- Restoration of floodplains to natural and beneficial function.
- Developing flood warning and response systems, which may include gauge installation, to notify residents of potential emergency flooding events.

Study Grants (Check All that Apply) Not Applicable

- Studies to aid in updating floodplain ordinances to maintain compliance with the NFIP or to incorporate higher standards that may reduce the risk of flood damage. This must include establishing processes for implementing the ordinance, including but not limited to, permitting, record retention, violations, and variances. This may include revising a floodplain ordinance when the community is getting new Flood Insurance Rate Maps (FIRMs), updating a floodplain ordinance to include floodplain setbacks or freeboard, or correcting issues identified in a Corrective Action Plan.
- Revising other land use ordinances to incorporate flood protection and mitigation goals, standards, and practices.
- Conducting hydrologic and hydraulic studies of floodplains. Applicants who create new maps must apply for a Letter of Map Revision or a Physical Map Revision through the

Federal Emergency Management Agency (FEMA). For example, a local government might conduct a hydrologic and hydraulic study for an area that had not been studied because the watershed is less than one square mile. Modeling the floodplain in an area that has numerous letters of map change that suggest the current map might not be fully accurate or doing a detailed flood study for an A Zone is another example.

- Studies and Data Collection of Statewide and Regional Significance.
- Revisions to existing resilience plans and modifications to existing comprehensive and hazard. Other relevant flood prevention and protection project or study.

Capacity Building and Planning Grants

- Floodplain Staff Capacity.
- Resilience Plan Development
- Revisions to existing resilience plans and modifications to existing comprehensive and hazard mitigation plans.
- Resource assessments, planning, strategies, and development.
 - Policy management and/or development.
 - Stakeholder engagement and strategies.

Location of Project (Include Maps): Refer to Appendix I – Vicinity Map

NFIP Community Identification Number (CID#):(See Appendix F) #510051-DCR1

Is Project Located in an NFIP Participating Community? Yes No

Is Project Located in a Special Flood Hazard Area? Yes No

Flood Zone(s) (If Applicable): Not Applicable

Flood Insurance Rate Map Number(s) (If Applicable): Not Applicable

Total Cost of Project: \$57,000

Total Amount Requested \$51,300 (Low-income Geographic Areas – 10%)

Appendices:

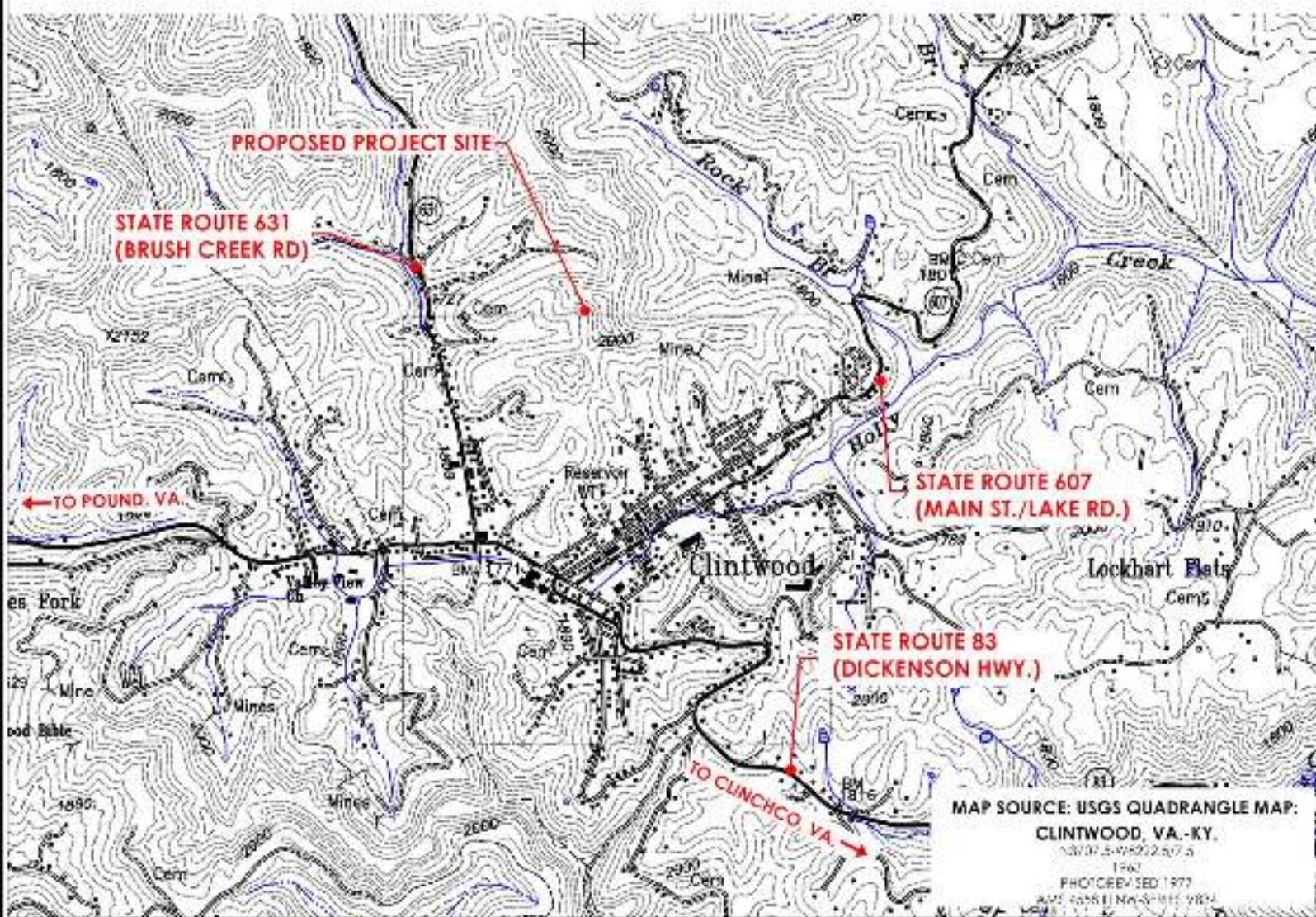
- Appendix I – Vicinity Map
- Appendix II – Flood Prone Areas with Photos
- Appendix III – Vulnerability Index, MHI & Distressed Communities Documentation
- Appendix IV – Scope of Work Narrative
- Appendix V – Budget Narrative
- Appendix VI – Matching Funds Resolution
- Appendix VII – Dickenson County Flood Hazard Mitigation Plan
- Appendix VIII – Town of Clintwood Comprehensive Plan
- Appendix IX – VCDR Scoring Criteria: Eligibility and Capacity Building & Planning and VDCR CPFP Checklist

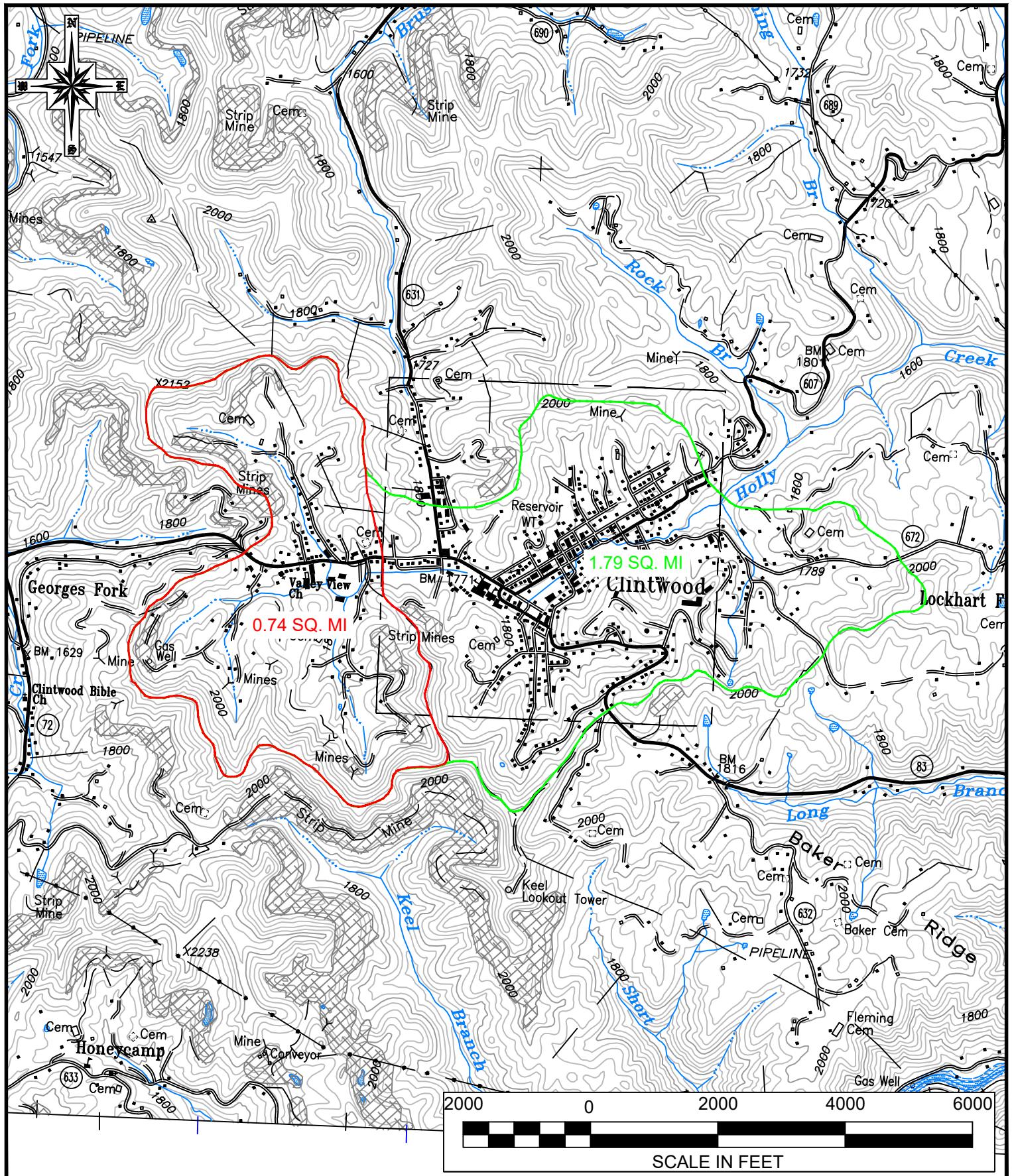
- Appendix X – Certified Floodplain Manager
- Appendix XI – Town Floodplain Ordinance

APPENDIX I: VICINITY & DRAINAGE AREA
MAPS

TOWN OF CLINTWOOD, VIRGINIA

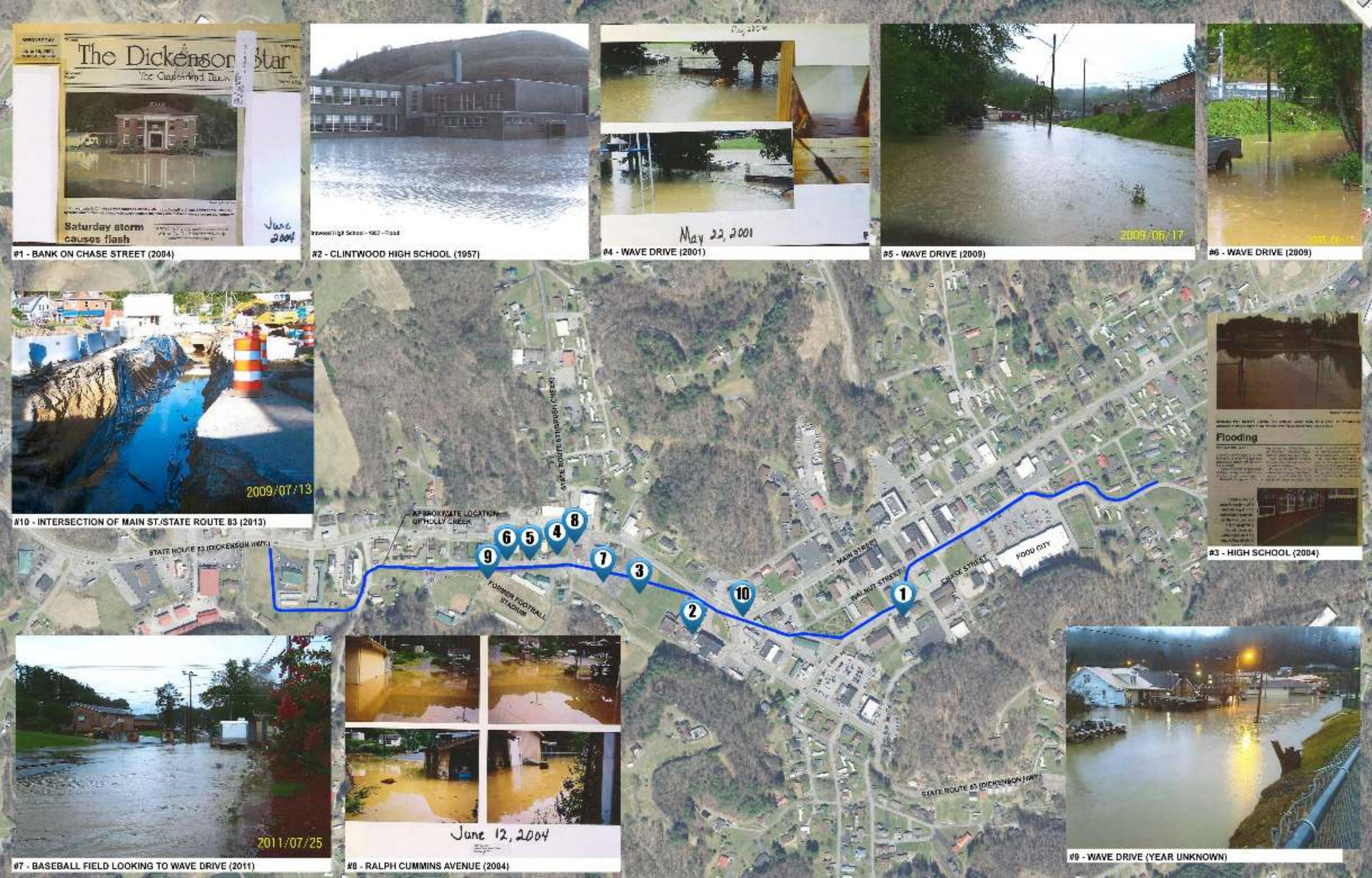
VIRGINIA COMMUNITY FLOOD PREPAREDNESS GRANT APPLICATION - GENERAL VICINITY MAP





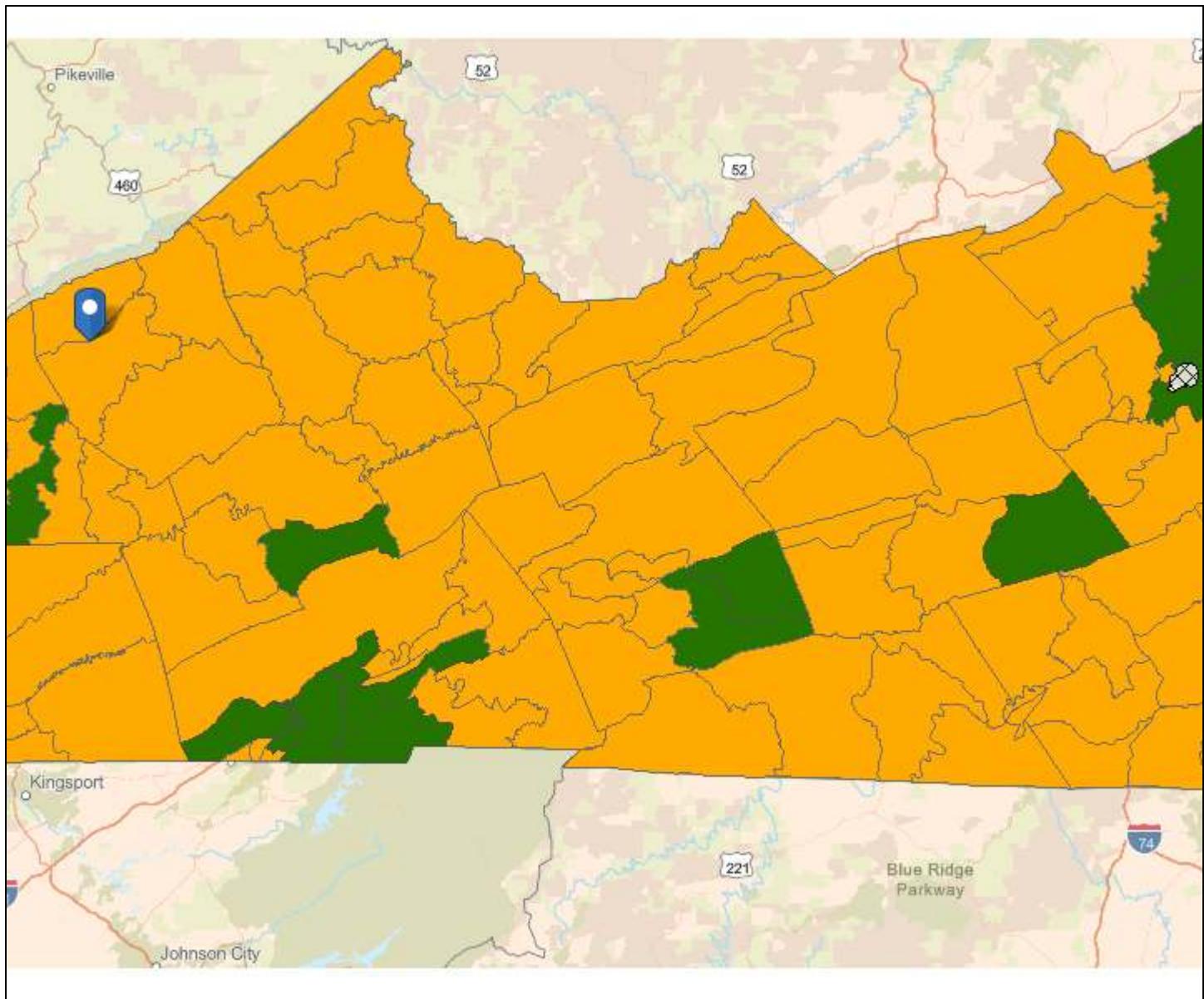
APPENDIX II: FLOOD PRONE AREAS WITH

PHOTOS



APPENDIX III: VULNERABILITY INDEX, MHI &
DISTRESSED COMMUNITIES DOCUMENTATION

Clintwood-VA Vulnerability Index 22Mar25



March 25, 2022

Social Vulnerability Classification

- Low Social Vulnerability
- High Social Vulnerability
- Moderate Social Vulnerability
- Not Socially Vulnerable
- ☒ Not included in the analysis

Social Vulnerability Index Score

- Very Low Social Vulnerability

1:1,155,581
0 5 10 0 5 10 20 mi

Created from the Virginia Vulnerability Viewer



ADAPTVA

INCOME IN THE PAST 12 MONTHS (IN 2020 INFLATION-ADJUSTED DOLLARS)

Note: This is a modified view of the original table produced by the U.S. Census Bureau. This download or printed version may have missing information from the original table.

Clintwood town, Virginia

Households

Label	Estimate
▼ Total	603
Less than \$10,000	12.6%
\$10,000 to \$14,999	5.1%
\$15,000 to \$24,999	20.7%
\$25,000 to \$34,999	9.3%
\$35,000 to \$49,999	24.9%
\$50,000 to \$74,999	16.7%
\$75,000 to \$99,999	1.7%
\$100,000 to \$149,999	2.5%
\$150,000 to \$199,999	3.8%
\$200,000 or more	2.7%
Median income (dollars)	35,450
Mean income (dollars)	45,920
➤ PERCENT ALLOCATED	

INCOME IN THE PAST 12 MONTHS (IN 2020 INFLATION-ADJUSTED DOLLARS)

Note: This is a modified view of the original table produced by the U.S. Census Bureau. This download or printed version may have missing information from the original table.

Dickenson County, Virginia	
Households	
Label	Estimate
▼ Total	5,727
Less than \$10,000	13.8%
\$10,000 to \$14,999	11.5%
\$15,000 to \$24,999	18.6%
\$25,000 to \$34,999	11.4%
\$35,000 to \$49,999	13.7%
\$50,000 to \$74,999	11.9%
\$75,000 to \$99,999	9.2%
\$100,000 to \$149,999	7.1%
\$150,000 to \$199,999	1.3%
\$200,000 or more	1.4%
Median income (dollars)	30,116
Mean income (dollars)	54,966
► PERCENT ALLOCATED	

County Economic Status and Number of Distressed Areas in Appalachian Virginia, Fiscal Year 2022

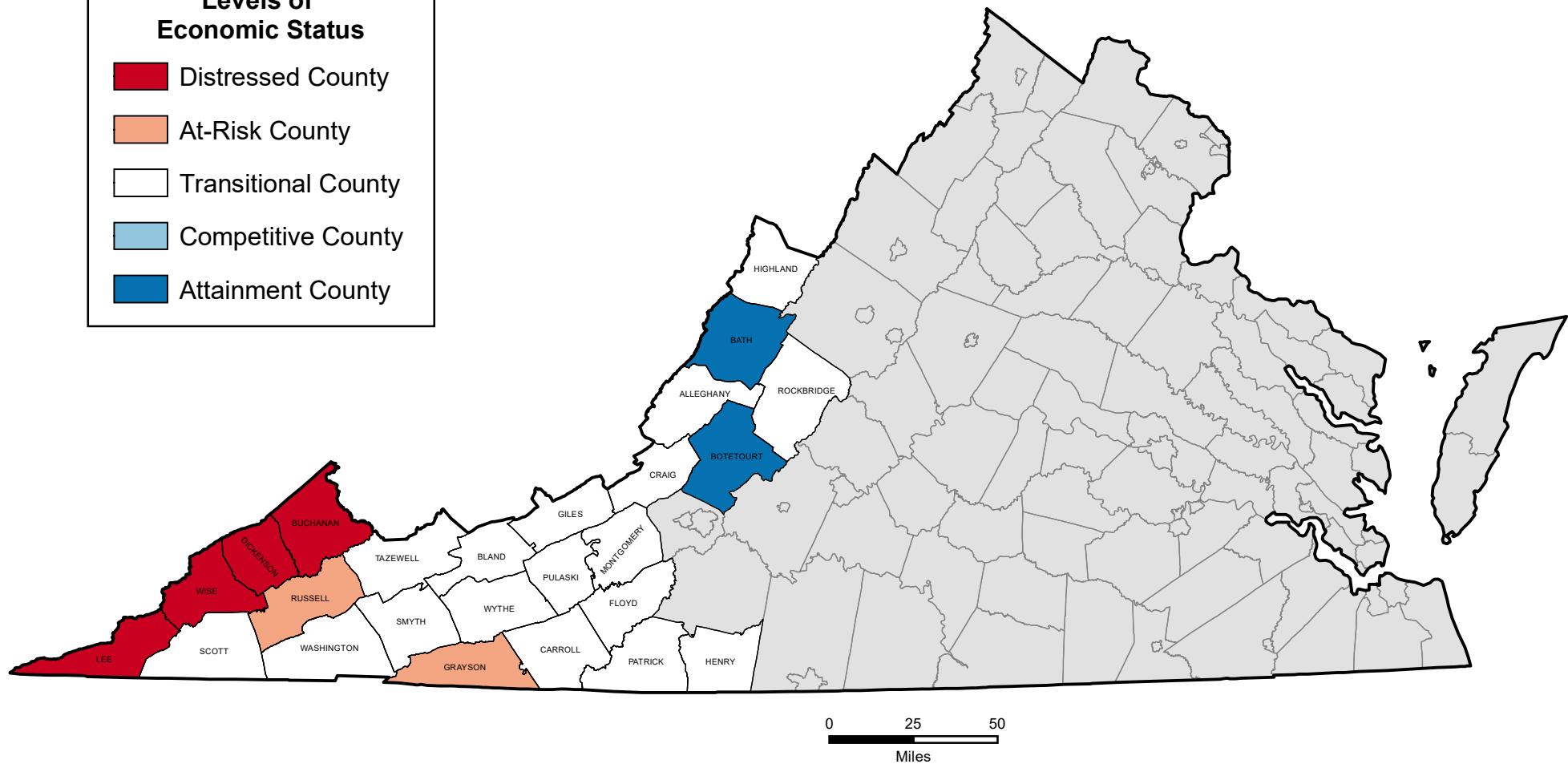
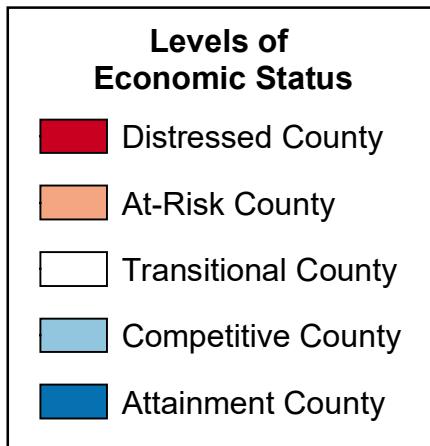
*Counties in **Bold** Contain Distressed Areas*

<i>County</i>	<i>Economic Status</i>	<i>Number of Distressed Areas</i>
Alleghany (+ Covington city)	Transitional	2
Bath	Attainment	
Bland	Transitional	
Botetourt	Attainment	
Buchanan	Distressed	
Carroll (+ Galax city)	Transitional	2
Craig	Transitional	
Dickenson	Distressed	
Floyd	Transitional	
Giles	Transitional	
Grayson	At-Risk	2
Henry (+ Martinsville city)	Transitional	8
Highland	Transitional	
Lee	Distressed	
Montgomery (+ Radford city)	Transitional	
Patrick	Transitional	
Pulaski	Transitional	
Rockbridge (+ Buena Vista city + Lexington city)	Transitional	1
Russell	At-Risk	4
Scott	Transitional	
Smyth	Transitional	2
Tazewell	Transitional	3
Washington (+ Bristol city)	Transitional	3
Wise (+ Norton city)	Distressed	
Wythe	Transitional	

Distressed Areas in Appalachian Virginia, Fiscal Year 2022

<i>County</i>	<i>Census Tract ID Number</i>
Alleghany (+ Covington city)	701
Alleghany (+ Covington city)	802.02
Carroll (+ Galax city)	701.01
Carroll (+ Galax city)	701.02
Grayson	601.01
Grayson	602.01
Henry (+ Martinsville city)	105
Henry (+ Martinsville city)	106.02
Henry (+ Martinsville city)	108
Henry (+ Martinsville city)	109
Henry (+ Martinsville city)	112
Henry (+ Martinsville city)	1
Henry (+ Martinsville city)	2
Henry (+ Martinsville city)	4
Rockbridge (+ Buena Vista city + Lexington city)	9306
Russell	301
Russell	302
Russell	303
Russell	306
Smyth	302
Smyth	306
Tazewell	204
Tazewell	205
Tazewell	209
Washington (+ Bristol city)	109
Washington (+ Bristol city)	201
Washington (+ Bristol city)	203

County Economic Status in Appalachian Virginia, Fiscal Year 2022



County Economic Status and Distressed Areas in Appalachian Virginia, Fiscal Year 2022

Levels of Economic Status

Distressed County

At-Risk County

Distressed Area

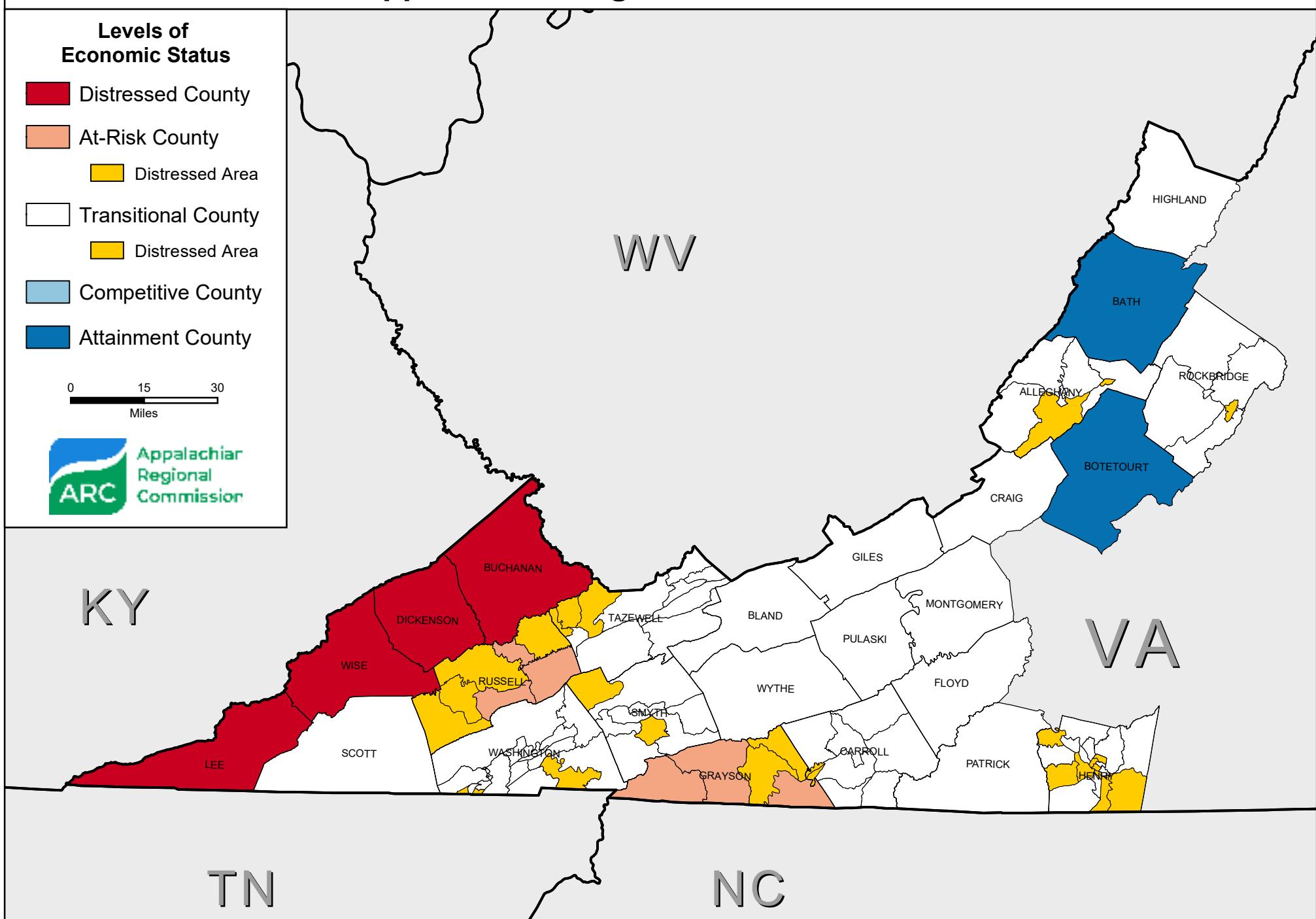
Transitional County

Distressed Area

Competitive County

Attainment County

0 15 30 Miles



APPENDIX IV: SCOPE OF WORK NARRATIVE

Appendix IV – Scope of Work Narrative Planning & Capacity Building

Capacity Building – Resiliency Plan

The Town of Clintwood is located in the western part of Dickenson County, with a population of 1,438 (Dickenson County – 14,318). It is the County seat and the largest of the three (3) towns in Dickenson County. Access is provided via US Route 23 and US Route 83; refer to Appendix I – Vicinity & Drainage Area Maps. US Route 83 is the only cross-county thoroughfare providing access to the more rural areas of the County, the Town of Haysi, and Buchanan County, the location of jobs for many who live in Dickenson County.

The Town does not participate in the National Flood Insurance Program (NFIP). However, the Virginia Department of Conservation and Recreation (VDCR) has assigned it CID #510051-DCR1. Clintwood does not have a Resiliency Plan (Plan) at this time. Dickenson County has submitted its Resiliency Plan to VDCR and is awaiting approval. Clintwood will use the County Plan as a basis for developing its own. Chris Rakes, County Building Inspector, will serve as the Locally Certified Floodplain Manager for the Town's Plan. A copy of his certification is provided in Appendix X – Certified Floodplain Manager.

Holly Creek is the only conveyance through Town. Due to the small drainage area of the creek (refer to Appendix I – Vicinity & Drainage Area Maps and Appendix V – Budget Narrative) and localized impact, the Town Plan will be less formalized than that of a larger community with numerous streams and rivers. The Town will provide the financial, technical assistance, and maintenance of the conveyance systems with current staff and equipment, as it has in the past. Additional training, staff, and other resources are not envisioned. Should additional, funding beyond the CFPF, be necessary, the Town will work with other state and federal agencies who fund similar projects with grant funds, as it is not in a position to incur additional debt for non-revenue generating projects.

The Resiliency Plan will further identify and provide planning and support, to mitigate the risks of Holly Creek's local flooding impacts. Public Meetings will be held to educate local stakeholders and solicit input prior to submission to VDCR. Services will generally consist of:

- Conduct a kick-off meeting with Town and County officials to review the County Plan and determine which elements are applicable to the Town; establish goals, objectives, roles, and responsibilities; and establish a timeline for completion.
- Compile available plans, reports, and other documents germane to generating the Plan.
- Develop a draft Plan for review by Town Council and input from Dickenson County.
- Conduct a Public Meeting soliciting input from local stakeholders.
- Submit the Plan to VDCR for review and approval.

The Town has solicited and procured professional engineering services of The Lane Group, Inc. (Lane) via a Master Services Agreement (Task Order-based) in compliance with the Virginia Procurement Act. Lane, in conjunction with Mr. Rakes, will provide expert consulting and advise relative to generating the Plan. Preparation of the Plan will also allow the Town to generate a Preliminary Engineering Report (PER) as a part of its Planning effort to remedy the localized flooding the Town is experiencing.

Planning – Preliminary Engineering Report

The PER will model and analyze the hydrology and hydraulics (H&H) of the existing drainage system to existing determine conveyance capacity. The H&H model will then be adjusted, sizing culverts and stream channels, to convey the 25-year event, the VDOT standard event for Minor Rural Arterial and Major Rural Collector (US Route 83). An opinion of probable cost for the design and construction will be generated from preliminary design plans for the improved drainage system. In addition to the technical aspects of the services, the PER will also address environmental concerns and compliance with the National Environmental Policy Act (NEPA); basis of design; permitting and construction issues; and other project elements necessary to fully analyze the project, its costs, and its impact to the community. The PER will be the basis of a future Project Application seeking CFPF funds. Services will generally consist of:

- Compile available mapping and conduct a field reconnaissance.
- Conduct field survey relative to conveyance system structure sizes and flow line elevations.
- Generate a hydrologic and hydraulic model of the system and proposed systems, sizing culverts and stream channels, to convey the 25-year event, the VDOT standard event for Minor Rural Arterial and Major Rural Collector (US Route 83).
- Develop conceptual plans.
- Contact state and federal agencies relative to NEPA compliance and generate an Environmental Assessment.
- Contact state and federal agencies, and private utilities relative to permit compliance.
- Generate an opinion of probable cost.
- Publish the PER.
- Meet with Town Council to review the PER and secure approval.
- Submit and secure VDCR approval.

APPENDIX V: BUDGET NARRATIVE

Appendix V – Budget Narrative Planning & Capacity Building

Project Information

Dickenson County is situated in the Cumberland Plateau Physiographic Province, comprised of sandstones, shales, and numerous surface and deep mine coal seams. This Province is characterized by deeply incised narrow valleys and steep, high ridges leading to rapid runoff and flooding peaks (“flash flooding”), with limited long-term inundation. The Town itself is located at the headwaters of Holly Creek. Holly Creek has a small drainage area of approximately 0.74 square miles where it enters to the west of the Town, increasing to 1.79 square miles to the east, where it exits, a possible reason it does not participate in the NFIP. Refer to Appendix I – Vicinity & Drainage Area Maps.

Flooding of downtown Clintwood has been problematic since the 1950’s. With the advent of coal strip mining in the 1970’s, the problem was further exacerbated. More recently, storms have been more intense and localized; climate change is suspected.

The recurrent and repetitive flooding problems is due to an inadequate stormwater drainage system conveying Holly Creek through the Town. As stormwater flows through Town, there are a number of constrictions where the downstream culverts are actually smaller than those upstream. The restricted flow creates backwater that floods the downtown, sometimes closing US Route 83. When the backwater exceeds the available storage capacity of the upstream areas, additional overflow flooding occurs in other areas. This has resulted in property damage and loss on a continuing basis. Residential and commercial areas are impacted. They include doctor’s offices, pharmacies, banks, auto dealerships, restaurants, and other businesses along the path. The creation of new in-town businesses is further hampered due to flooding concerns.

The purpose of this Application is to generate a Resiliency Plan for the Town and PER, analyzing the storm drainage system, generating a preliminary design for the mitigation improvements, and projecting design and construction costs for a future CFPF Project Application.

Funding

Per Adapt Virginia, the Social Vulnerability Index is “Moderate.” The Median Household Income (MHI) for the Town of Clintwood and Dickenson County is \$45,920 and \$30,116, respectively. The MHI for the Commonwealth is \$76,398. As such, the Town and County are 60% and 39% of the state MHI, respectively, well below the 80% threshold used to determine a low-income geographic area. In addition, the Appalachian Regional Commission lists Dickenson County and the Town of Clintwood as “Distressed.” Refer to Appendix III – Vulnerability Index, MHI & Distressed Communities for the documentation.

Based on the foregoing, the Town of Clintwood qualifies for 90% CFPF grant funding with a 10% local match. Refer to Appendix VI – Matching Funds Resolution & County Support Letter whereby the Town will commit funds to meet the 10% match.

Budget & Schedule

The following provides the costs, Town of Clintwood matching funds requirement, and the CPFP funds requested from VDCR.

Task	Total Cost	Town Match	CPFP Funding	Schedule
Resiliency Plan	\$ 18,500	\$ 1,850	\$ 16,650	6 months
Preliminary Engineering Report	\$ 38,500	\$ 3,850	\$ 34,650	6 months
Total	\$ 57,000	\$ 5,700	\$ 51,300	6 months

APPENDIX VI: MATCHING FUNDS RESOLUTION &
COUNTY SUPPORT LETTER

This Instrument Prepared By:
Greg Baker Attorneys at Law, PLLC
P.O. Box 338
Clintwood, Virginia 24228

RESOLUTION

This Resolution is made effective as of this 5 day of April, 2022, by the Clintwood Town Council the governing body of the Town of Clintwood, hereinafter referred to as the "Town".

RECITALS

WHEREAS, the Town desires to apply to the Virginia Department of Conservation and Recreation for a Virginia Community Flood Preparedness Fund grant;

WHEREAS, the Virginia Community Flood Preparedness Fund grant application requires a grant matching requirement of 10% from the Town;

WHEREAS, the Town desires to resolve the following:

RESOLUTION

NOW THEREFORE, be resolved that the Clintwood Town Council the governing body of the Town of Clintwood hereby agrees to apply for a Virginia Community Flood Preparedness Fund grant and further agrees it has identified and will make available the 10% matching funds, with authorization pending Virginia Department of Conservation and Recreation approval of the Virginia Community Flood Preparedness Fund grant funds to the Town.

IT SHALL BE FURTHER RESOLVED that the Clintwood Town Council authorizes the Mayor of the Town, Danny Lambert to complete any documentation required or necessary to finalize the grant application.

THE TOWN OF CLINTWOOD, VIRGINIA, BY ITS DULY ELECTED TOWN COUNCIL, THE GOVERNING BODY OF THE TOWN OF CLINTWOOD HEREBY RECORDS ITS VOTE ON THE ABOVE RESOLUTION AS FOLLOWS:

Danny Lambert, Mayor: Non-Voting

Ronald Kendrick: Aye

Talbert Bolling: Aye

Doris Rife: Aye

James Childress: Aye

Shelly Mullins: Aye

ADOPTED THIS 5 day of April, 2022.

Danny Lambert, Mayor: Danny Lambert

Judy Steele: Judy Steele

ATTEST: TOWN CLERK

DICKENSON COUNTY BOARD OF SUPERVISORS

Board of Supervisors
PEGGY KISER, CHAIRWOMAN
Erwinton District

JOSH EVANS, VICE-CHAIRMAN
Wills District

RON PETERS
Sandick District

RHONDA SLUSS
Clintwood District

SHELBYE WILLIS
Kenady District

County Administrator
LARRY BARTON

County Attorney
WILLIAM J. STURGILL

Of Counsel/Economic Development Advisor to the Board
CLARENCE E. "BUD" PHILLIPS

P.O. Box 1096, Clintwood, VA 24226
Telephone: (276) 926-1576
Fax: (276) 916-1649



818 Happy Valley Drive, Clintwood, VA

March 6, 2022

Mayor Danny Lambert
Town of Clintwood
248 Main Street
Clintwood, Virginia 24228

Re: Virginia Department of Conservation and Recreation
Virginia Community Flood Preparedness Fund Grant Application

Dear Mayor Lambert:

The Dickenson County Board of Supervisors is fully supportive of the Town's submission to the Virginia Department of Conservation and Recreation (VDCR) Virginia Community Flood Preparedness Fund (CFPF) grant application. As some of the County offices are located in downtown Clintwood, we are well aware of the flooding problems the Town has faced over the past few decades. Preparation of a Resiliency Plan and Preliminary Engineering Report will allow the Town to address this issue and add to the safety of residents not only in the Town, but also in the County, where access to other towns and rural communities is affected when US Route 83 in the downtown is affected by high water and flooding.

The Town has recently submitted its Resiliency Plan to VDCR for approval. The use of our approved Plan may facilitate the Plan to be developed by the Town. The County is committed to working with the Town on this initiative.

Should you have additional questions or needs the County can address, please contact us at your earliest convenience.

Sincerely,

Larry Barton, County Administrator

Chris Rakes, County Building Official and Certified Floodplain Manager

**APPENDIX VII: DICKENSON COUNTY FLOOD
HAZARD MITIGATION PLAN**

Cumberland Plateau Planning Commission

Hazard Mitigation Plan

August 20, 2013

DICKENSON COUNTY BOARD OF SUPERVISORS

Board of Supervisors

DAVID YATES, CHAIRMAN
ERVINTON DISTRICT

DELANO SYKES, VICE-CHAIRMAN
SANDLICK DISTRICT

DONNIE W. RIFE
CLINTWOOD DISTRICT

SHELBYE WILLIS
KENADY DISTRICT

GARY HALL
WILLIS DISTRICT



County Administrator
G. DAVID MOORE, JR.

P.O. Box 1098
Clintwood, Virginia 24228
Telephone: 276/926-1676
Fax: 276/926-1649
david.moore@bos.dcwin.org

RESOLUTION

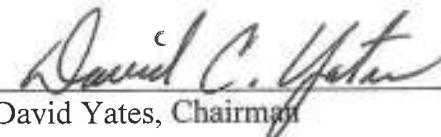
WHEREAS, the Disaster Mitigation Act of 2000, as amended, required that local governments develop and adopt natural hazard mitigation plans in order to receive Hazard Mitigation Grant Program (HMGP) project grants and certain other forms of non-emergency disaster assistance; and

WHEREAS, a Mitigation Advisory Committee ("MAC") comprised of representatives from all jurisdictions within the Cumberland Plateau Planning District was convened in order to study Dickenson County's risks from and vulnerabilities to natural hazards, and to make recommendations on mitigating the effects of such hazards on Dickenson County; and

WHEREAS, the efforts of the MAC members in consultation with members of the public, private and non-profit sectors, have resulted in the development of a Hazard Mitigation Plan Update for the Cumberland Plateau Planning District communities including Dickenson County.

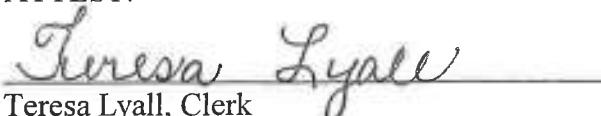
NOW THEREFORE, BE IT RESOLVED by the Dickenson County Board of Supervisors that the Cumberland Plateau Planning District Commission Hazard Mitigation Plan dated August 20, 2013 is hereby approved and adopted for Dickenson County. A copy of the plan is attached to this resolution by reference.

ADOPTED this 20th day of August, 2013.



David Yates, Chairman

ATTEST:



Teresa Lyall, Clerk



A Region Connected

Cumberland Plateau Planning District

July 30, 2013

Dickenson County Board of Supervisors
David Moore, County Administrator
P.O. Box 1098
Clintwood, VA 24228

AUG - 1 2013

Dear Mr. Moore:

RE: Hazard Mitigation Plan Update Adoption

This is to inform you that the Cumberland Plateau Hazard Mitigation Update Plan has been approved by FEMA and can now be adopted by each of the localities in the Cumberland Plateau Planning District Commission area. Enclosed are all of the changes and updates to the original Hazard Mitigation Plan, pages should correspond to the original and can be removed and replaced where needed. Also enclosed is a Resolution that again must be adopted and approved by each locality in the Cumberland Plateau Planning District. This adoption must take place as soon as possible by each locality. The Update Plan must be adopted by September 20, 2013 and signed resolution mailed back to us in order for full and final approval from FEMA. If you have any questions please let me know. Thank you so much for your time and efforts during this process.

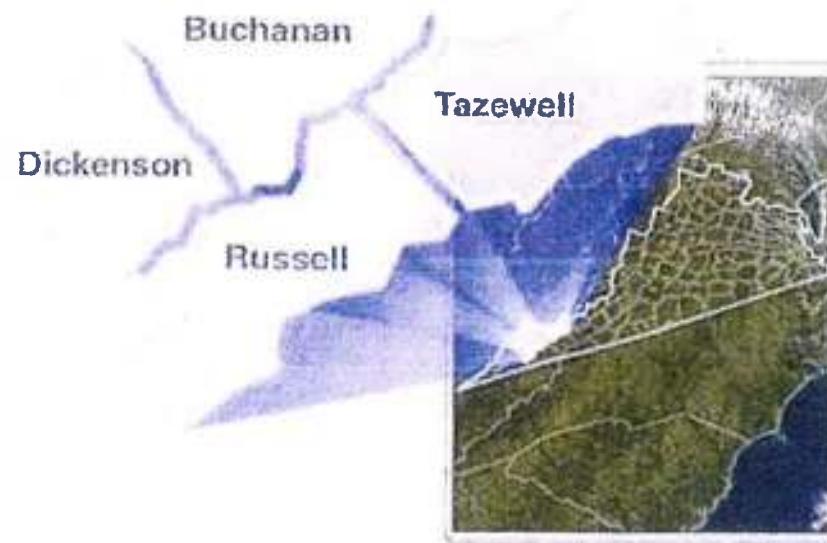
Sincerely,

M. Shane Farmer
Planner CPPDC

Cumberland Plateau Planning District Commission

Hazard Mitigation Plan Update

May, 2013



**Cumberland Plateau Planning District Commission
Hazard Mitigation Plan**

Table I-1 summarizes the results of this analysis, which is explained more fully in Section V of this plan.

Table I-1 — Hazard Identification Results	
Hazard Type	Hazard Level
Flooding	High
Severe Winter Storms	Medium-High
Wildfire	Medium-High
Landslides	Medium-High
Severe Thunderstorms/Hail Storms	Medium
Severe Wind	Medium-High
Earthquake	Medium
Dam/Levee Failure	Medium
Drought	Medium
Tornado	Low
Extreme Heat	Low
Karst	Low

The **Mitigation Strategy**

During the presentation of findings for the Hazard Identification and Risk Assessment workshop, the Mitigation Advisory Committee (MAC) was asked to provide comments and suggestions on actions and policies, which could lessen the area's vulnerability to the identified hazards. The MAC supported the following preliminary comments below:

- Top priorities for the area were public safety, public education, and reduction of potential economic impacts of disasters.
- Alternatives should consider the impacts on the Cumberland Plateau Planning District as a whole.
- Alternatives must not conflict with other local government programs.
- Outreach and other efforts should be attempted to repetitive loss properties, including those designated by FEMA.
- Past experiences from disasters should be built upon.
- The success of past mitigation projects should be considered in developing alternatives.

The following overarching goal and six specific goals were developed by the MAC to guide the area's future hazard mitigation activities.

OVERARCHING COMMUNITY GOAL:

"To develop and maintain disaster resistant communities that are less vulnerable to the economic and physical devastation associated with natural hazard events."

**Cumberland Plateau Planning District Commission
Hazard Mitigation Plan**

SECTION III. PLANNING PROCESS

In 2003, the counties of Buchanan, Dickenson, Russell and Tazewell, Virginia, as members of the Cumberland Plateau Planning District, (referred to hereinafter as the Planning District) collaborated with the Virginia Department of Emergency Management to undertake a multi-jurisdictional natural hazards planning initiative. To facilitate the planning process, a Mitigation Advisory Committee (MAC) was established to 1) provide leadership and guidance for the planning initiative, and 2) develop a beginning set of goals to guide the development of a natural hazards mitigation plan. Currently this document is an update to that original plan with the addition of hazards that have effected the Planning District from 2005-partial 2011.

These goals were based on the principles of hazard awareness and disaster prevention. These goals included:

- Ensure that the Planning District has sustainable communities and businesses resistant to the human and economic costs of disasters;
- Maintain and enhance the economic stability, public health, and safety to the communities of the area;
- Ensure that the Planning District's cultural richness and environmental quality are not jeopardized by the occurrence of a disaster; and
- Recognize the potential impact of natural or manmade hazards on public and private buildings and facilities, and the utility and transportation systems that serve them.

Beginning in March 2011, the MAC held regular meetings and commenced work to identify and update the area's natural hazards. They coordinated and consulted with other entities and stakeholders to identify and delineate natural and manmade hazards within the four local jurisdictions and to assess the risks and vulnerability of public and private buildings, facilities, utilities, communications, transportation systems, and other vulnerable infrastructure. New FEMA Digital Flood Insurance Rate Maps were incorporated into the plan update. Neighboring counties adjacent to the planning district were contacted by the MAC as the planning process began. However, no response was received.

In addition, the MAC initially contacted all incorporated towns within the Planning District to solicit interest and input concerning participation in the development of a multi-jurisdiction hazard mitigation plan. Representatives from the towns participated in committee meetings throughout the process to again solicit their input for the inclusion of mitigation actions from each community into the mitigation strategy portion of the plan and to request adoption of the plan upon completion, as well. The communities' responses are incorporated into the final plan. Table III-1 provides more information on the individual MAC meetings.

**Cumberland Plateau Planning District Commission
Hazard Mitigation Plan**

Table III-1 — Mitigation Planning Workgroup Meetings

CUMBERLAND PLATEAU PLANNING DISTRICT COMMISSION Steering Committee Participation	
Meeting Dates	Meeting Purpose
4/20/11	Kick-off Meeting
7/11/2011	HMA Meeting
5/2012	Presentation of HIRA Findings
7/2012	Mitigation Strategy Development Meeting
8/2012	Second Mitigation Strategy Development Meeting
11/2012	Public Meeting

In September 2010, Cumberland Plateau Planning District Commission (Planning District) to update the multi-hazard mitigation plan including a Hazard Identification and Risk Assessment (HIRA) and mitigation strategies. The Planning District worked with the stakeholders throughout the Planning District localities updating the past Hazard Mitigation plan to ensure that potential stakeholders participated in the process and would have opportunities for input in the draft and final phases of the plan update.

The Mitigation Advisory Committee and Mitigation Management Team

A Mitigation Advisory Committee (MAC) and Mitigation Management Team (MMT) comprised of public representatives, private citizens, businesses, and organizations worked with the Planning District and provided input on each section of the plan, including hazards addressed, mitigation actions, and prioritization. Efforts to involve county departments and community organizations that might have a role in the implementation of the mitigation actions or policies included invitations to attend meetings and serve on the MAC, e-mails of minutes and updates, strategy development workshops, and outreach through local government meetings and public libraries, plus opportunities for input and comment on all draft deliverables.

The Planning District would like to thank and acknowledge the following persons who served on the MAC, MMT and their representative departments and organizations throughout the plan update process:

**Table III-2 — Cumberland Plateau Planning District Commission
Mitigation Advisory Committee Members**

Robert Craig Horn	Buchanan County Board of Supervisors, Administrator
Dave Moore	Dickenson County Board of Supervisors, Administrator
Rufus Hood	Russell County Board of Supervisors, Administrator
Jim Spencer	Tazewell County Board of Supervisors, Administrator
Tim Potter	Town of Grundy IDA, Director
James McGlothlin	Town of Cedar Bluff, Town Manager
Tim Taylor	Town of Richlands, Town Manager
Dr. Sue Cantrell	Cumberland Plateau Health District, Director
Keith Viers	Cumberland Plateau Regional Housing Authority, Director
Darrell Cantrell	Buchanan County PSA, Director
Ron Phillips	Dickenson County PSA, Director
Jerry Woods	Russell County PSA, Chairman
Dahmon Ball	Tazewell County PSA, Director
Andy Jones	Russell County Medical Center
Conrad Hill	VDOT
Steve Dye	Russell County Sheriff's Department
Richard Thacker	Dickenson County Emergency Services
Dr. Mark Estep	Southwest Virginia Community College
Todd Burns	AEP
Patty Tauscher	American Red Cross
Jess Powers	Russell County, Emergency & Hazardous Material Coordinator
Matt Slemp	Dickenson County, 911 Coordinator
Dave White	Tazewell County, Emergency & Hazardous Material Coordinator
Ricky Bailey	Buchanan County, 911 Coordinator
Mike Watson	Town of Bluefield, Manager
Harry Ferguson	Russell County Assessor
Barbara Fuller	Southwest Virginia CC
David White	Tazewell County Emergency Services
Rick Chitwood	T & L
Henry Stinson	Russell County Highway & Safety Commission
Jess Powers	Russell County Emergency & Hazardous Material Coordinator
James Baker	T & L
Matt Anderson	Tazewell County, Planner/Engineer
Shane Farmer	Cumberland Plateau PDC

**Cumberland Plateau Planning District Commission
Hazard Mitigation Plan Update**

**Table III-2 — Cumberland Plateau Planning District Commission
Mitigation Advisory Committee Members**

Doug Rose	Dickenson County Schools
Jerry Ward	Buchanan County Asst. Emergency Coordinator
Darrell Johnson	Castlewood Water & Sewage Authority
James R. Sutherland	Town of Clinchco, Mayor
C. H. Wallace	Town of Honaker, Mayor
Mike Duty	Town of Lebanon, Town Manager
Larry Yates	Town of Haysi, Mayor
David Sutherland	Town of Cleveland, Mayor
Johnathan Gibson	Town of Pocahontas, Mayor
Todd Day	Town of Tazewell, Town Manager
Mickey Rhea	Russell County Building Official
Roger Sword	Russell County Planning Commission
Toby Edwards	Cumberland Plateau Regional Waste Authority, Director
Dr. Brenda Lawson	Tazewell County Schools
Gary Jackson	Tazewell County Building Official
Dr. Brenda Hess	Russell County Schools, Superintendent
Tom Childress	Tazewell County Planning Commission, Chairman
Brian Hieatt	Tazewell County Sheriff's Department
Ray Foster	Buchanan County Sheriff's Department
Don Layne	Buchanan County Planning Commission, Chairman
Larry Ashby	Buchanan County Schools, Superintendent
Carl Turner	Dickenson County Building Official
Allen Compton	Dickenson County Planning Commission, Chairman
Bob Hammons	Dickenson County Sheriff's Department
David Darden	Clinch Valley Medical Center, CEO
Joan Jamison	Buchanan General Hospital, CEO
Angela Beavers	Cumberland Plateau PDC
Donald Baker	Town of Clintwood, Mayor

**Cumberland Plateau Planning District Commission
Hazard Mitigation Plan Update**

**Table III-3 — Cumberland Plateau Planning District Commission
Hazardous Mitigation Management Team**

Richard Thacker	Dickenson County Emergency Services
Bo Bise	Russell County, 911 Coordinator
Matt Slemp	Dickenson County, 911 Coordinator
Derrick Ruble	Tazewell County, 911 Coordinator
Ricky Bailey	Buchanan County, 911 Coordinator
David White	Tazewell County Emergency Services
Jess Powers	Russell County Emergency & Hazardous Material Coordinator
Shane Farmer	Cumberland Plateau PDC
Jerry Ward	Buchanan County Asst. Emergency Coordinator
Angela Beavers	Cumberland Plateau PDC

Public Participation and Citizen Input

Several opportunities were provided to the public for input and participation throughout the planning process. Drafts of the Hazard Identification and Risk Assessment and Mitigation Strategies were made available via the project team website. The planning process was discussed on a regular basis at the Cumberland Plateau Planning District Commission board meetings, which includes representation of all counties and towns in the planning district. Additionally, the plan was discussed at Board of Supervisor meetings in the participating counties.

Other PDC's such as Mt. Rogers and Lenowisco were contacted and sought out for advice as they were working on updating the Hazard Mitigation plans for their localities.

In October, a copy of the Draft Hazard Mitigation Plan was made available in the County Administrators office in Buchanan, Dickenson, Russell, and Tazewell counties, and each of the town halls. Copies of the announcements notifying the public of the availability of the draft plan for review is included in Appendix D.

In addition, an open public meeting was held in November 2012 at 11:00 a.m. at the Southwest Virginia Community College in Richlands to provide an overview to the public of the planning process and the results of the hazard identification and mitigation strategy. The meeting date was advertized in the local papers. Also, draft copies of the complete plan are also available on the Cumberland Plateau PDC website at www.cppdc.org for review and comment by the public.

Communities Participating in the National Flood Program							
CID	Community Name	County	Int'l FIRM Identified	Int'l FIRM Identified	Conn Eff Date	Reg. Error Date	Tribal
B100000	GRUNDY, CITY OF	GRUNDY, CITY OF	GRUNDY, CITY OF	GRUNDY, CITY OF	2012-09-04	2012-09-04	No
B100200	HORNBECK, VILLAGE OF	HORNBECK, VILLAGE OF	HORNBECK, VILLAGE OF	HORNBECK, VILLAGE OF	2012-09-04	2012-09-04	No
S100200	CEDAR BLUFF, TOWNSHIP OF	2012-09-04	2012-09-04	No			
G100000	CLEVELAND, TOWNSHIP OF	CLEVELAND, TOWNSHIP OF	CLEVELAND, TOWNSHIP OF	CLEVELAND, TOWNSHIP OF	2012-09-04	2012-09-04	No
R100000	LEBANON, TOWNSHIP OF	LEBANON, TOWNSHIP OF	LEBANON, TOWNSHIP OF	LEBANON, TOWNSHIP OF	2012-09-04	2012-09-04	No
P100000	POCAHONTAS, TOWNSHIP OF	POCAHONTAS, TOWNSHIP OF	POCAHONTAS, TOWNSHIP OF	POCAHONTAS, TOWNSHIP OF	2012-09-04	2012-09-04	No
T100000	CLINTWOOD, TOWNSHIP OF	CLINTWOOD, TOWNSHIP OF	CLINTWOOD, TOWNSHIP OF	CLINTWOOD, TOWNSHIP OF	2012-09-04	2012-09-04	No
B100300	GRINDLICK, TOWNSHIP OF	GRINDLICK, TOWNSHIP OF	GRINDLICK, TOWNSHIP OF	GRINDLICK, TOWNSHIP OF	2012-09-04	2012-09-04	No
R100300	ST. PAUL, TOWNSHIP OF	2012-09-04	2012-09-04	No			
C100000	CLEVELAND, VILLAGE OF	CLEVELAND, VILLAGE OF	CLEVELAND, VILLAGE OF	CLEVELAND, VILLAGE OF	2012-09-04	2012-09-04	No
H100000	CLINTWOOD, VILLAGE OF	CLINTWOOD, VILLAGE OF	CLINTWOOD, VILLAGE OF	CLINTWOOD, VILLAGE OF	2012-09-04	2012-09-04	No

Communities Not in the National Flood Program							
CID	Community Name	County	Int'l FIRM Identified	Int'l FIRM Identified	Conn Eff Date	Sanction Date	Tribal
10000000	THE CUMBERLAND PLATEAU PLANNING DISTRICT COMMISSION	2012-09-04	2012-09-04	No			

Adoption

Participating jurisdictions must formally adopt the hazard mitigation plan in order for it to be approved by the State of Virginia and the Federal Emergency Management Agency. This plan was adopted by the Counties of Buchanan, Dickenson, Russell and Tazewell and the towns of Grundy, Clinchco, Haysi, Cleveland, Honaker, Lebanon, Bluefield, Cedar Bluff, Pocahontas, Richlands and Tazewell. The town of Clintwood did not participate in the flood program. Copies of the adoption language for each community is included in Appendix E.

CUMBERLAND PLATEAU PLANNING DISTRICT

Appendix A: Hazard Identification Worksheet

Hazard Type	Probability	Impacts			Total Score	Hazard Level
		Affected Area	Primary Impact	Secondary Impacts		
SEVERE WINTER STORM	6	3.2	1.4	1.5	37	Medium-High
DROUGHT	4	3.2	0.7	1	20	Medium
EARTHQUAKE	4	3.2	1.4	1	22	Medium
WILDFIRE	8	2.4	2.1	0.5	40	Medium-High
FLOOD	8	2.4	2.1	2	52	High
EXTREME HEAT	2	3.2	0.7	0.5	9	Low
LANDSLIDES	8	1.6	2.1	1	38	Medium-High
SEVERE THUNDERSTORM / HAIL STORM	8	1.6	0.7	0.5	22	Medium
DAM/LEVEE FAILURE	2	1.6	2.8	2	13	Medium
TORNADO	2	1.6	2.1	1	9	Low
SEVERE WIND	6	3.2	1.4	1.5	37	Medium-High
KARST	2	0.8	0.7	0.5		Low

Total Score = Probability x Impact, where:

Probability = (Probability Score x Importance)

Impact = (Affected Area + Primary Impact + Secondary Impacts), where:

Affected Area = Affected Area Score x Importance Primary

Impact = Primary Impact Score x Importance Secondary

Impacts = Secondary Impacts Score x Importance

Hazard Level	Total Score	(Range)	Hazard Level	Distribution
0.0	12.0	Low	2	
12.1	28.0	Medium	4	
28.1	48.0	Medium-High	3	
48.1	64.0	High	1	

The probability of each hazard is determined by assigning a level, from 1 to 4, based on the likelihood of occurrence from historical data. The total impact value includes the affected area, primary impact and secondary impact levels of each hazard. These levels are then multiplied by an importance factor to obtain a score for each category. The probability score is multiplied by the sum of the three impact categories to determine the total score for the hazard. Based on this total score, the hazards will be separated into four categories based on the hazard level they pose to the planning area: high, medium-high, medium, low.

Probability		Importance	2.0
<i>Based on average annual frequency of occurrence estimated from historical data</i>			
<u>Level</u>	<u>Average Annual Frequency</u>	<u>Score</u>	
1	Unlikely (less than 1 % occurrence)	2	
2	Possible (between 1% and 10% occurrence)	4	
3	Likely (between 10% and 100% occurrence)	6	
4	Highly likely (near 100% occurrence)	8	

Affected Area		Importance	0.8
<i>Based on size of geographical area of community affected by hazard</i>			
<u>Level</u>	<u>Affected Area</u>	<u>Score</u>	
1	Isolated - limited to one building/facility	0.8	
2	Small - limited to a handful of buildings/facilities	1.6	
3	Medium - affecting a portion of an area	2.4	
4	Large - affecting a widespread area	3.2	

Primary Impact		Importance	0.7
<i>Based on percentage of damage to typical facility in community</i>			
<u>Level</u>	<u>Impact</u>	<u>Score</u>	
1	Negligible - less than 10% damage	0.7	
2	Limited - between 10% and 25% damage	1.4	
3	Critical - between 25% and 50% damage	2.1	
4	Catastrophic - more than 50% damage	2.8	

Secondary Impacts		Importance	0.5
<i>Based on estimated secondary impacts to community at large</i>			
<u>Level</u>	<u>Impact</u>	<u>Score</u>	
1	Negligible - no loss of function, downtime, and/or evacuations	0.5	
2	Limited - minimal loss of function, downtime, and/or evacuations	1	
3	Moderate - some loss of function, downtime, and/or evacuations	1.5	
4	High - major loss of function, downtime, and/or evacuations	2	

NOTE:
Total Score values assume a margin of error of + 10 percent.

Section 2 - Hazard Identification

The FEMA guidelines emphasize using "available data" for this plan, especially for the Hazard Identification and Risk Assessment (HIRA). As mentioned earlier, this Appendix was developed by the Virginia Tech Center for Geospatial Information Technology, under a subcontract with Anderson and Associates of Blacksburg, Virginia. Besides the data provided by the Town of Bluefield, the following organizations all provided data used for this HIRA:Anderson and Associates, Inc.

- Bluefield Daily Telegraph
- Cumberland Plateau Planning District Commission (Virginia)
- Dewberry
- Federal Emergency Management Agency
- Marshall Miller and Associates
- Region I Planning and Development Council (West Virginia)
- Tazewell County, Virginia
- Tuck Engineering
- US Census Bureau
- US Geological Survey
- Virginia Department of Conservation and Recreation
- Virginia Department of Emergency Management
- Virginia Department of Transportation
- Virginia Geographic Information network
- Virginia Tech Center for Geospatial Information Technology
- Willis Engineering

Types of Hazards

While nearly all disasters are possible for any given area in the United States, the most likely hazards that could potentially affect the communities in the Cumberland Plateau Planning District generally include:

- Flooding
- Severe Winter Storms
- Wildfires
- Landslides
- Dam Failures
- Drought
- Earthquake
- Severe Wind
- Severe Thunderstorms
- Tornadoes
- Extreme Heat
- Karst

Cumberland Plateau Planning District Commission Hazard Mitigation Plan

Types of Hazards

While nearly all disasters are possible for any given area in the United States, the most likely hazards (based on local official knowledge and professional judgment) that could potentially affect the communities in the Cumberland Plateau Planning District generally include:

- Dam Failures
- Drought
- Earthquake
- Flooding
- Landslides
- Karst Topography
- Severe Thunderstorms
- Severe Wind
- Severe Winter Storms
- Tornadoes
- Wildfires
- Extreme Heat

Depending on the severity, location, and timing of the specific events, each of these hazards could have devastating effects on homes, business, agricultural lands, infrastructure and ultimately citizens.

In order to gain a full understanding of the hazards, an extensive search of historic hazard data was completed. This data collection effort utilized meetings with local community officials, existing reports and studies, state and national data sets, and other sources. A comprehensive list of sources utilized for this plan can be found at the conclusion of this document.

Unfortunately, extensive local historical data is not currently available for many of the potential hazards. In some cases, the precise number of events that have affected the Planning District and the subsequent level of impact to the local communities are not known. In these cases, state and regional hazard information was collected and referenced whenever possible.

Probability of Hazards

The historical data collected includes accounts of all the hazard types listed above. However, some hazards have occurred much more frequently than others with a wide range of impacts. By analyzing the historical frequency of each hazard, along with the associated impacts, the hazards that pose the most significant risks to the Cumberland Plateau Planning District can be identified. This analysis will allow the local communities to focus the Mitigation Strategy of those hazards that are most likely to cause significant impacts.

Prioritizing the potential hazards that can threaten the Planning District will be based on two separate factors:

- the probability that a potential hazard will affect the community, and
- the potential impacts on the community in the event such a hazard occurs.

**Cumberland Plateau Planning District Commission
Hazard Mitigation Plan**

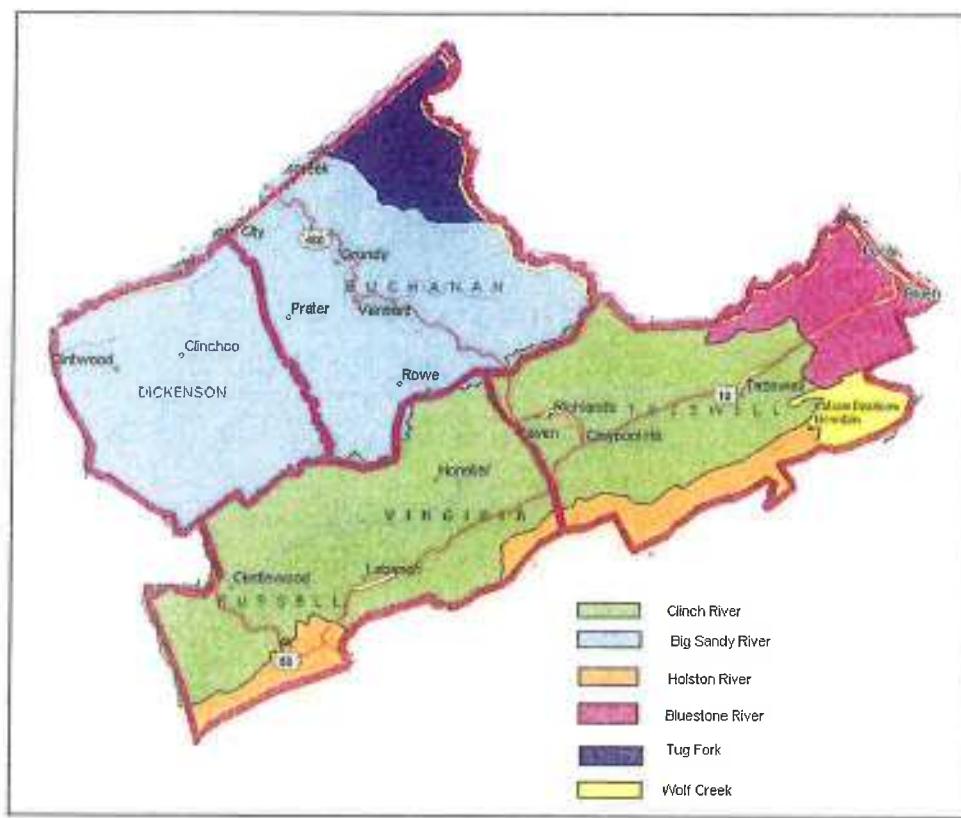


Figure V-1 — Cumberland Plateau Watersheds

Hazard History

The following sections include a description of the known flood history by major watershed. Because a majority of the flood history and flood data available for the area is organized by watershed (as opposed to by county), the discussion of flood characteristics for the CPPD also have been organized by watershed.

A list of repetitive loss properties in the Planning District are as follows in the chart below:

Community	Total # of Repetitive Loss Properties	# Residential	# Commercial
Bluefield	12	5	7
Buchanan County	6	5	1
Buchanan Town	6	2	4
Dickenson County	2		2
Tazewell County	15	13	2
Tazewell Town	2		8
Grundy Town	10	2	1
Richlands Town	11	10	1
Pocahontas Town	1		1
Haysi Town	1		1

Cumberland Plateau Planning District Commission Hazard Mitigation Plan

Planning District varies from area to area. Specific building types will be discussed in the specific flood area descriptions below.

Structures at Risk

In order to assess the Planning District's potential vulnerability to flooding, specific data regarding structures located in the floodplain was collected as a part of this analysis. Structures potentially in the floodplain were identified by comparing the floodplain areas from the FEMA FIRMs with each County's existing building data. Specific data on these structures was collected during a 'windshield survey' and included the structures' occupancy type, building material type, number of stories, area, value per square foot, total value, and flooding source. Using the type, occupancy, and use of these structures, estimated building values were developed. For the purpose of this analysis, comparable buildings with the same uses, approximate age and general conditions were identified in the Planning District. Tax appraisal values for these buildings (minus land value) and R. S. Means Square Foot Costs were used to develop a square foot value for each building type, which was applied to the properties located in the flood plain to estimate a structure value. Typical per square foot costs for building construction were considered in analyzing the relative accuracy numbers developed for this analysis and some adjustments were made for certain properties in the field based on visual analysis (e.g., decreases in value for blighted or damaged buildings).

Data including the location of existing structures in all four counties located within the Planning District is available in a GIS format, however, detailed data regarding the structures is limited. A vast majority of the existing structures are classified as an unidentified building type. Additional data does vary from county to county but, in general, the location of existing hospitals, police stations, schools, fire stations, and government buildings are known. Therefore using the digital flood data described above, a count of the number of structures located within the floodplain was generated and total value at risk approximated.

From the data collected, a total of 6,045 structures were located in the floodplain, with an estimated total value of over \$290 million dollars. This number is based on estimated values for each of the building types described above. Because the structure type for many of the structures is listed as unknown, the cost of the average residential structure was utilized.

Tables V-5 through V-8 include a summary of the number, value, and predominant use of the structures located in the floodplain of all FEMA recognized flood sources. A more detailed discussion of the vulnerability of each flood source follows these tables.

**Cumberland Plateau Planning District Commission
Hazard Mitigation Plan**

**Table V-5: Structures at Risk by Flooding Source
Buchanan County**

Flood Source	Number of Structures	Total Value
Big Sandy River	3,219	\$150,964,600
Tug Fork	989	\$55,051,000

Table V-6: Structures at Risk by Flooding Source

Flood Source	Number of Structures	Total Value
Big Sandy River	322	\$12,979,400

**Table V-7: Structures at Risk by Flooding Source
Russell County**

Flood Source	Number of Structures	Total Value
Clinch River	691	\$31,190,250

**Table V-8: Structures at Risk by Flooding Source
Tazewell County**

Flood Source	Number of Structures	Total Value
County-wide	824	\$40,533,400

The vast majority of structures located in the floodplain of the Cumberland Plateau planning area are residential. The most common type of structure in the flood plain is single-family homes or mobile homes. Mobile homes tend to be more vulnerable than other residential types due to their poor structural stability and flood-prone construction materials as well as the reduced means these residents have to protect themselves from potential flood damage.

Critical Facilities

The impacts of floodwaters on critical facilities, such as police and fire stations, hospitals, and water or wastewater treatment facilities, can greatly increase the overall effect of a flood event on a community. Some of these facilities in the Planning District are located in areas with a high risk to flooding. As stated previously, the location of some of these types of structures are known throughout the Planning Area. Using this data, a list of these facilities located in the floodplain has been generated, and is included in Table V-9. It should be noted that these facilities have been determined to be in the floodplain using a planning level analysis, and should be used only as a planning tool. In order to accurately determine if a structure is actually located in the floodplain, site-specific information must be available.

Cumberland Plateau Planning District Commission
Hazard Mitigation Plan

Table V-9 — Known Critical Facilities in the Floodplain

Jurisdiction	Type	Facility
Buchanan County	Fire and Rescue	Knox Creek Volunteer Fire
	Fire and Rescue	Grundy Volunteer Fire
	Fire and Rescue	Quality Care Ambulance Service
	Fire and Rescue	Dismal River Volunteer Rescue
	Fire and Rescue	Council Volunteer Fire
	Government Building	Buchanan County Courthouse
	School	Hurley Combined School
	School	Vansant Elementary School
	Hospital	Buchanan General Hospital
	Fire and Rescue	McClure River Volunteer Fire
Dickenson County	Government Building	Lebanon Town Hall
	School	Cleveland Elementary School
	Treatment Plant	Central Shop STP
	Treatment Plant	Cleveland STP
Russell County	Treatment Plant	Honaker STP
	Police	Richlands Police
	School	Raven Elementary School
	Fire and Rescue	Rescue 9
Tazewell County	Fire and Rescue	Rescue 10

Special needs populations are those that require additional attention during a flood event, are not as able to protect themselves prior to an event, or are not able to understand potential risks. These can include non-English populations, elderly populations, or those in a lower socioeconomic group. Special needs populations in the Planning District area are primarily lower income and elderly individuals, living in a flood-prone area, without the resources to take actions to protect themselves.

Future Land Use Trends

Due to existing development and very steep topography outside of the river valleys, developable land in the Planning District is scarce. For that reason, one of the dominant development trends in the area is redevelopment. Older, lower value structures are being destroyed and replaced by newer construction with significantly higher dollar values. This is especially true with older mobile homes that are being replaced by new pre-fabricated modular homes. Many of these structures are located in the floodplain, where this redevelopment trend is increasing the value of structures at risk to damages due to flooding in the Planning District.

A complete list of events from 2005-2011 can be found at the end of this document.

Winter Storms

Severe winter storms and blizzards are extra-tropical cyclones that originate as mid-latitude depressions (FEMA, 1997). Snowstorms, blizzards, and ice storms are the most

Cumberland Plateau Planning District Commission Hazard Mitigation Plan

common examples. These storms can bring heavy snowfall, high winds, ice, and extreme cold with them. Historically, winter storms in southwestern Virginia have produced significant snowfall, sleet, and freezing rain.

Recent Snowstorm History

Between January 20 and 22, 1985, an arctic cold front swept across the state, ushering in extreme cold and high winds. Wind chill temperatures plunged well below zero. Winds knocked out power compounding the effects of the cold. Pipes froze and burst. Fresh snowfall of 4 inches helped temperatures across the entire state fall below zero. New records were set at several locations in the state.

During the winter of 1993-1994, Virginia was struck by a series of ice storms. Although ice storms are not an uncommon event in the valleys and foothills of the Appalachian Mountains, and the region had been overdue for an ice storm, it was unprecedented to have several occur in succession.



The most significant winter storm to affect the Cumberland Plateau Planning District was the "Super Storm of March '93", also known as "The Storm of the Century". Occurring between March 12 and 15, 1993, this storm affected 26 states throughout the central and eastern portions of the United States. The storm resulted in a Federal disaster declaration. Throughout the region, the snowfall amounts ranged from 12 inches to over 48 inches depending on elevation. Extreme southwest Virginia saw 30 to 42 inches of snow from the storm (the most snow in more than 25 years). Some roofs collapsed under the weight of the snow. Winds produced blizzard conditions over portions of the west with snow drifts up to 12 feet. Interstates were shut down. Shelters were opened for nearly 4,000 stranded travelers, and those that left were without heat and electricity. Virginia called out its National Guard to help with emergency transports and critical snow removal.

During the February 10 and 11, 1994 ice storm, some areas of southern Virginia received a devastating 3 inches of ice, causing tremendous tree damage and power outages for up to a week. The "Blizzard of '96" or the "Great Furlough Storm" began late on Saturday, January 6. As much as 30 to 36 inches of snow fell over the western mountains.

On December 18, 2009 the area was hit by a heavy snowstorm that moved out of the eastern Gulf of Mexico. The heavy snow event was declared a state of emergency by Governor Kaine. Multiple homes were damaged and electricity was out for many days. In some locations the snow was above 2 feet.

Cumberland Plateau Planning District Commission
Hazard Mitigation Plan

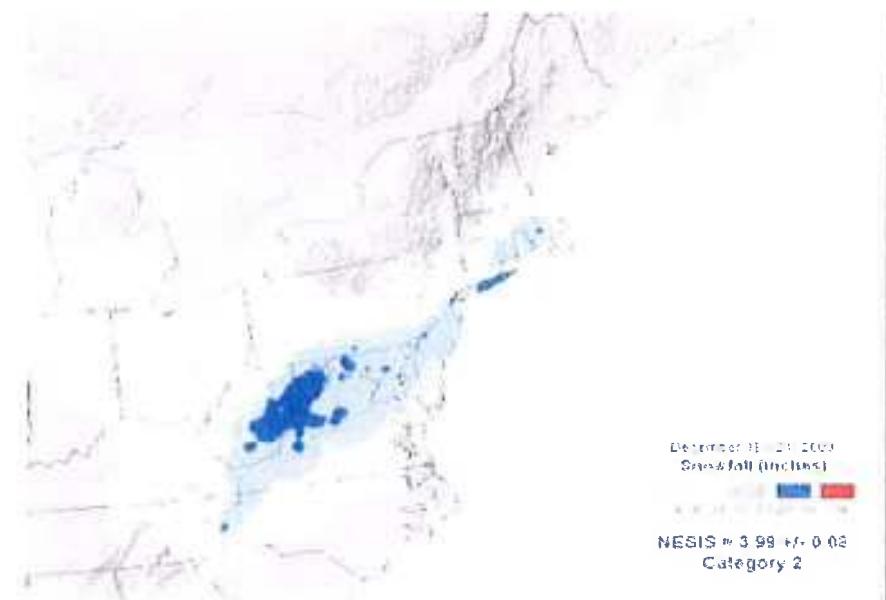


Figure V-6 — Snowfall Totals from 2009 Blizzard

Table V-10 includes ranges of snowfall for select historic events in Southwest Virginia. This table is not inclusive of all historic snowfall events.

Table V-10 — Historic Snow Fall Amounts

Date	Amount
February 12 -March 10, 1960	65 inches
December 10 - 12, 1960	4 - 13 inches
January 20 - 22, 1985	4 inches
March 13-14, 1993	30 - 42 inches
January 6-13, 1996	30 - 36 inches
January 27-28, 1998	12 - 24 inches
December 18-21 , 2009	10-20 inches

Hazard Profile

Although the Commonwealth of Virginia is not generally associated with severe winter storms, the mountainous area in the southwestern portion of the state regularly experiences several snow storms each year. These storms can produce between 4 and 12 inches of snow from each event. Total average annual snowfall within the Planning District varies from county to county. Buchanan County has an average annual snowfall of 23" per year, Dickenson County is 15" per year, Russell County 21" per year, and Tazewell County 40" per year as illustrated in Figure V-7. However, as Table V-10 illustrates, storms producing higher snowfall amounts are possible.

Cumberland Plateau Planning District Commission Hazard Mitigation Plan

Utility infrastructure also can be adversely affected by winter storms. Heavy snow and ice can cause power lines to snap, leaving citizens without power and, in some cases, heat for hours or even days. Likewise, telephone lines can also snap, disabling communication within portions of a community. Frozen water pipes can rupture in people's homes, and water and sewer mains can also freeze and leak or rupture if not properly maintained. These ruptures can lead to flooding and property damage.

People's health can also be adversely affected by severe winter weather. People who lose heat in their homes and do not seek alternate shelter, people who get stuck in snowdrifts while driving, or people working and playing outdoors can suffer from hypothermia and frostbite. Since winter weather hazards generally affect the entire Planning District and vary in intensity and form, it is not possible to quantify primary effects or specific damages.

Secondary effects

Secondary effects of winter storms are broad. Treacherous driving conditions can result in automobile accidents in which passengers may be injured and property damages may occur. Deliveries of heating fuel can be delayed by impassable roads. Impassable roads also can result in schools being closed because buses are not able to access their routes and bring children to school. The costs of salting and sanding roads and of snow removal can be staggering to communities both large and small. The costs to repair roads after spring thaws also can be significant.

After a significant snowfall, the resulting thaw that occurs when the temperature rises above freezing can cause flooding in some areas. As noted in the flood portion of this document, January through March are the months with the highest occurrences of flooding. The rainy season coincides with snowfall and subsequent melting. Because of the mountainous terrain in this area, flood events tend to occur rapidly and with little warning.

The local economy can also suffer if businesses close due to inclement winter weather. The impact could be significant in a larger event. In addition, disabled transportation systems may mean that shipments of goods and services are delayed, which may result in decreased inventory for retailers and increased inventory for industrial and commercial suppliers.

A complete list of events from 2005-2011 can be found at the end of this document.

Wildfire

"A wildfire is an uncontrolled fire spreading through vegetative fuels, exposing and possibly consuming structures" (FEMA 386-2, 2001) and may originate from a variety of ignition sources. The risk of wildfires, though not as high as it is in the western U.S., is a genuine concern for the Commonwealth of Virginia. Each year, about 1,600 wildfires consume a total of 8,000 to 10,000 acres of forest and grassland in the Commonwealth. During the fall drought of 2001, Virginia lost more than 13,000 acres to wildfires (Virginia Department of Forestry website)

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level of High, Medium, or Low. The results are shown on the map prepared by VDOF, "Cumberland Plateau, Virginia Fire Risk Zones", included at the end of this section. As indicated on the map, only a small area within Russell and Tazewell Counties has a low fire risk zone. The Cumberland Plateau Planning District is mostly a high risk area. This high risk is most likely due to the topography (steep slopes) and the inaccessibility of the area, particularly in Buchanan and Dickenson Counties.

Vulnerability Analysis

As stated in the section above, according the VDOF Wildfire Risk Assessment large portions of the Cumberland Plateau Planning District are at high risk for wildfire occurrence. Although these high risk areas tend to be located in the more rural and mountainous portions of the planning district, higher density areas have also been classified as having a high risk. Because these high risk areas are so vast, many of the residents of the planning area live or work in or near a high risk area. Therefore, the most significant threat to the Cumberland Plateau Planning District is that to human life and safety. Many residents in the area live within the urban-wildlife interface and are at the greatest risk from potential wildfires. A commonly found scenario in the Cumberland Plateau Planning District is the 'stacking' of structures up a ridge with one-way access and flammable fuels in between the structures. These circumstances can greatly increase the risk of loss from wildfire and is hazardous to firefighters trying to protect the structures.

Structures at Risk

As stated in the previous section, large portions of the Cumberland Plateau Planning District have been designated as having a high risk to wildfires as determined by VDOF. In an attempt to quantify the potential vulnerability in the areas, the approximate number structures located in these areas have been estimated. As mentioned in earlier sections of this report, the counties included in the CPPDC have a comprehensive GIS system which includes an inventory of building locations and building type. With this data available, and because the VDOF Risk Assessment is also readily available in GIS format, determining the number of structures located in each Risk Wildfire zone was relatively simple. Table V-12 below includes the results of this analysis.

Table V-12 — Structures in Wildfire Risk				
Jurisdiction	High Risk	Medium Risk Zone	Low Risk Zone	Percent Structures in High Risk Zone
Buchanan	22,903	660	484	95%
Dickenson	16,999	1,575	45	91%
Tazewell	27,268	13,113	865	66%
Russell	19,556	14,888	317	56%

A complete list of events from 2005-2011 can be found at the end of this document.

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Hazard Areas

Because of the physical characteristics of the area, virtually the entire Cumberland Plateau Planning District is located in an area that has a high risk to the effects of landslides. As stated previously, due to the many factors that contribute to when and where a landslide will occur, it is extremely difficult to indicate precise locations that are at a greater risk of being affected by a landslide than other areas. However, one of the best indicators of where a landslide may occur is the locations of past landslide activity. These areas have demonstrated susceptibility to landslide occurrence, making additional landslides at these locations likely.

Historic landslide problem areas are indicated in the landslide location maps included at the end of this section. As noted previously, these maps do not depict all areas within the planning district where historic landslides have occurred, or where they may be a problem in the future. Historically, detailed records have not been maintained by local or county governments, therefore the data required to identify all known high landslide risk areas located within the planning district is not available.

Vulnerability Assessment

Because the conditions that cause a landslide are extremely site specific, the impacts of an individual landslide can vary greatly. Landslides can damage or potentially destroy anything in the path of the slide including homes, businesses, roads, and utilities. Landslide debris can also partially or fully block rivers, in which case the potential for significant flooding exists. The precise impacts of a landslide will depend on the specific characteristics of the slide, as well as the level of development in the slide area.

Due to the extreme steep slopes throughout the Cumberland Plateau Planning District, virtually all of the development in the area is at high risk to the effects of landslides. The vulnerability of specific structures and assets can only be determined by a detailed investigation of the site characteristics, primarily the proximity to at-risk slopes. A majority of the more densely developed areas of the planning district are located in areas with more gradual slopes. Therefore, the risk of widespread damages due to landslides in the densely developed areas is limited. However, a majority of the unincorporated areas throughout the planning district have extremely steep slopes. The potential for landslide damage to structures in these areas could be high.

Based on past occurrences, the most vulnerable assets located within the Cumberland Plateau Planning District are its roadways. Many of the roads in the area traverse steep slopes increasing the vulnerability to damage. The damage to a roadway affected by a landslide can vary from partial blockage to total destruction. In addition to the damage to the road itself, more significant economic and safety impacts may be felt by the community due the loss of function of the roadway. Many of the roadways throughout the planning district provide the only direct access from one community to another, or potentially the only access certain remote areas. This reduction in access can increase the response time of emergency vehicles, creating a potentially serious threat to public safety in these areas.

A complete list of events from 2005-2011 can be found at the end of this document.

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Due to the mountainous terrain, tornado occurrences in the area have been rare, although they are possible. Table V-14 includes historical tornado occurrences in the counties within the Planning District.

Table V-14 — Tornadoes from 1950-2011

County	# of Tornadoes
Buchanan	1
Dickenson	2
Russell	6
Tazewell	2

Wind Zones

The Planning District is not classified as an area with a higher than average base wind speed nationally. According to the Virginia Uniform Statewide Building Code (BOCA, 1996), the minimum design wind speed for the Planning District area is 70 mph.

High wind events, primarily severe thunderstorms, have occurred in every portion of the Planning District. There are no proven indicators to predict specifically where high winds may occur, and these events can be expansive enough to affect the entire area. Although localized geography, such as mountain ranges and gorges, can contribute to potential damages caused by these events, no specific locations within the Planning District have been identified due to these conditions. Therefore, the entire Planning District is considered to have an equal risk of being impacted by a high wind event.

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Building Type	Building Damage	Contents Damage	Building Damage	Contents Damage
Manufactured	25%	40%	50%	100%
Light Engineered	5%	2.5%	15%	15%
Non-Engineered Wood	7.5%	5%	20%	20%
Non-Engineered Masonry	5%	2.5%	15%	15%
Fully Engineered	2.5%	2.5%	5%	15%

A complete list of events from 2005-2011 can be found at the end of this document.

Earthquakes

The earth surface is composed of a series of tectonic plates, which are constantly moving and shifting against one another. The movement of these plates causes stress to develop along plate boundaries, and along fault lines. When the stress along one of these boundaries or fault lines exceeds the strength of the adjacent rock and earth, a slip or fracture occurs, releasing the built up energy as waves. Energy waves travel through the earth's crust up to the ground surface, causing the shaking that is associated with an earthquake.

Earthquakes in the United States occur most frequently along the West Coast, due to the close proximity to the North American plate boundary. Earthquakes can also occur along the East Coast of the United States, but the mechanisms causing these earthquakes are as not well understood, as these earthquakes occur within the plate rather than at plate boundaries (USGS, 2003).

The Commonwealth of Virginia is subject to earthquakes occurring in two primary areas of seismic activity. The Eastern Tennessee Seismic Zone extends from Charleston, South Carolina through western North Carolina and eastern Tennessee into central Virginia. The New Madrid Seismic Zone is located in southern Missouri. Both zones have the potential to affect the Cumberland Plateau Planning District. Although these faults have not produced a significant earthquake in recent years, both have a history and the potential to produce severely damaging earthquakes in the future.

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Primary and Secondary Impacts

As listed in Table V-161, the primary impact of an earthquake can range from toppled chimneys and broken windows, to crack walls and roadways, to complete collapse of structures and bridges. Depending on the magnitude and location of the earthquake, the overall effects on the community can range from minimal to catastrophic. In larger events, loss of life and injuries can be extensive and the cost of damages can be massive. As stated previously, although historically moderate earthquakes have affected the Planning District, the potential for a higher magnitude earthquake does exist, due mainly to the proximity of the two key seismic zones.

In some cases, the secondary impacts from an earthquake can be as damaging and disruptive to a community and its citizens. The most significant potential secondary effect of an earthquake to the Planning District is the potential for landslides. Ground shaking during an earthquake can cause previously weakened steep slopes to fail, as well as otherwise stable slopes. The specific impacts of landslides are discussed further in other sections of this plan.

In addition to landslides other secondary effects can include disruption of critical services such as water, electrical, and telephone services. Damage to police stations, fire stations, and other emergency service facilities can weaken a community's ability to respond in the crucial hours and days following an event.

A complete list of events from 2005-2011 can be found at the end of this document.

Drought

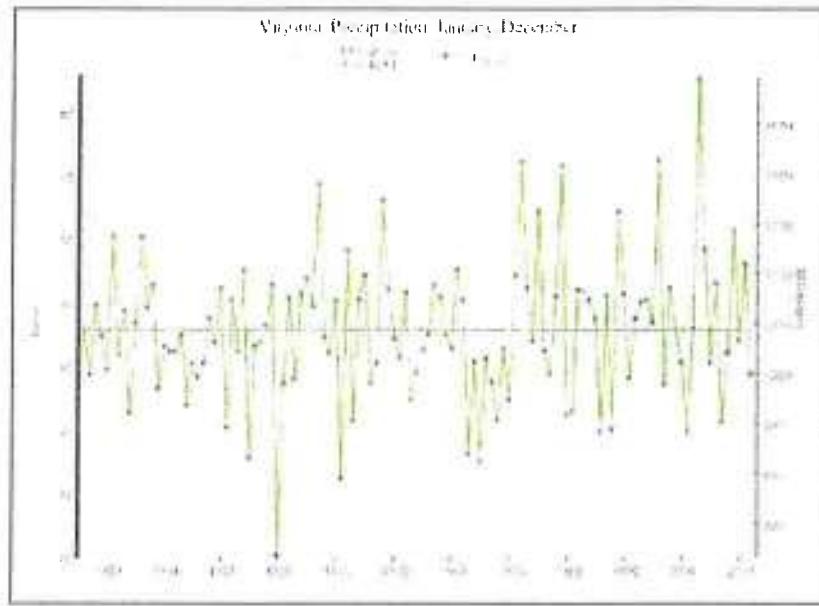
"Drought is a condition of moisture deficit sufficient to have an adverse effect on vegetation, animals, and man over a sizeable area" (USGS, 2000). Three significant types of drought can affect the Cumberland Plateau Planning District, which are meteorological, agricultural, or hydrologic drought. Meteorological drought is simply a departure from a normal precipitation amount, and is reliant on no other factors. Agricultural drought describes a soil moisture deficiency to the extent it effects the needs of plant life, primarily crops. Hydrologic drought is defined in terms of shortfall of water levels of lakes and reservoirs, and stream flow in rivers, streams, and soils (Multi Hazard Risk Assessment, 2000). Drought is a natural part of most climatic areas, but the severity of droughts differs based on duration, geographic extent, and intensity.

Hazard History

There have been a number of significant droughts recorded in Virginia since 1900. The most recent drought extended over a period of one year, from 2007 to 2008. This period saw rainfall levels well below normal and caused many communities throughout the region to institute water restrictions.

Although meteorologists have attempted to predict long term changes and trends in weather patterns, the onset of a significant drought cannot be predicted. Extended periods of dry weather have occurred many times from over the past 100 years.

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V-12 — Virginia Statewide Precipitation, January 1900-2010

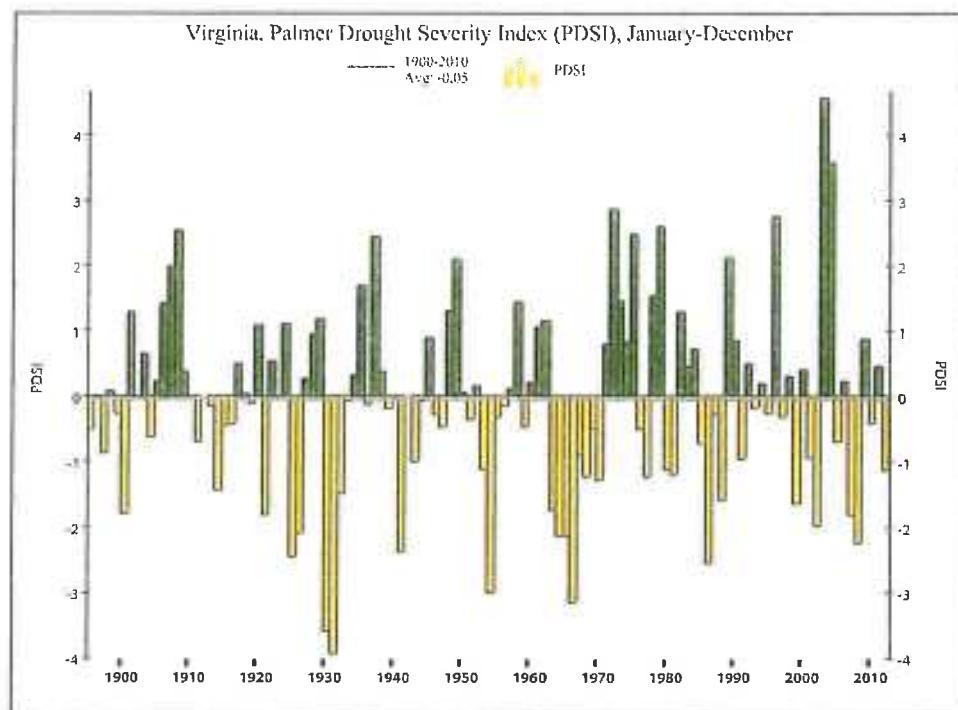
Hazard Profile

Just as there are multiple types of drought, there are multiple methods to indicate when a drought is occurring, as well as the severity of the drought. The multiple indices are based on a variety of data including precipitation amounts, stream flows, soil moisture, snow pack, as well as other water storage data. Commonly, the drought indices used depends on the type of drought being measured. It is important to note that not all types of drought must be occurring simultaneously. In some cases an area can be affected by one form of drought, while levels measuring another form of drought are normal.

The most commonly used drought indicator is the Palmer Drought Index. This index was developed in the 1960s by the National Oceanic and Atmospheric Administration, and uses temperature and rainfall data to determine dryness. Negative numbers indicate drought, while positive numbers indicate surplus rainfall. Minus two is considered a moderate drought, minus three is severe drought, and minus four is extreme drought. Likewise, positive two is considered a moderate rainfall, positive three a severe rainfall, and positive four, an extreme rainfall. In addition to the Palmer Index, the Standard Precipitation Index (SPI) and the Crop Moisture Index (CMI) also are used to measure drought. The SPI relates the deficit in precipitation compared to normal levels to varying degrees of time. Because the duration of lower than average precipitation levels has varying effects on stream flows, water storage levels, and soil moisture content, the SPI attempts to measure drought based on the long term deficit in precipitation. The CMI measures short term moisture conditions across predominate crop producing regions. It is based on the temperature and precipitation levels for a given week as well as the CMI value for the previous week (<http://www.drought.unl.edu/whatis/indices.htm>).

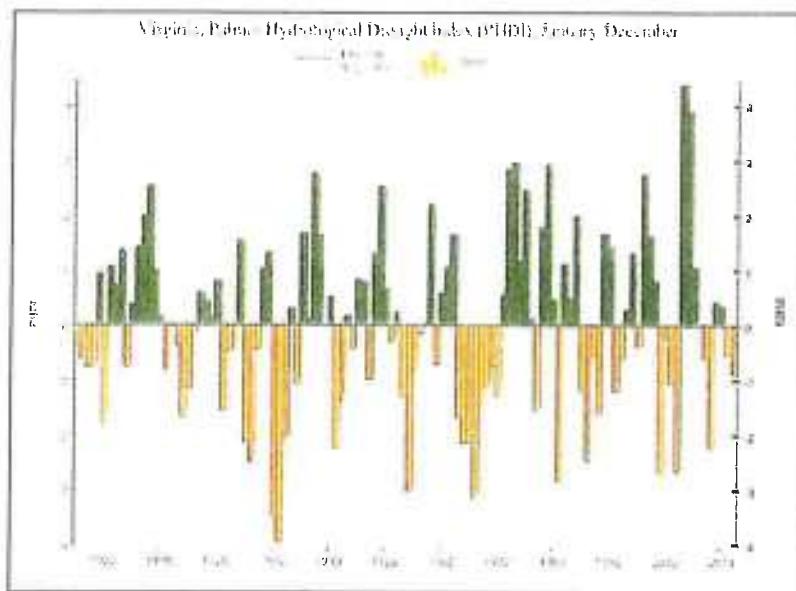
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The Virginia State Climatology Office uses the Palmer Drought Severity Index (PDSI) to measure long-term moisture status. A reading of -3.0 is considered to be a "severe drought." Shown below is the PDSI history for Virginia from 1900 through December 1, 2010. .



Virginia State Climatology Office
Figure V-13 —Virginia Palmer Drought Severity Index

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V-14 — Virginia Statewide Palmer Hydrological Drought Index, January 1900 - December 2010

Vulnerability Analysis

If a significant drought event were to occur, it could bring extensive economic, social, and environmental impacts to the Planning District. Commonly one of the most significant economic effects to a community is the agricultural impacts. Other economic effects could be felt by businesses that rely on adequate water levels for their day to day business such as carwashes and laundromats.

Drought also can create conditions that promote the occurrence of other natural hazards such as wildfires and wind erosion. The likelihood of flash flooding is increased if a period of severe drought is followed by a period of extreme precipitation. Low-flow conditions also decrease the quantity and pressure of water available to firefighters to fight fires, while the dry conditions increase the likelihood fires will occur.

Environmental drought impacts include those on both human and animal habitats and hydrologic units. During periods of drought, the amount of available water decreases in lakes, streams, aquifers, soil, wetlands, springs, and other surface and subsurface water sources. This decrease in water availability can affect water quality such as salinity, bacteria, turbidity, and temperature increase and pH changes. Changes in any of these levels can have a significant effect on the aquatic habitat of a numerous plants and animals found throughout the Planning District. Low water flow can result in decreased sewage flows and subsequent increases in contaminants in the water supply. Decrease in the availability of water also decreases drinking water supply and the food supply as food sources become scarcer. This disruption can work its way up the food chain within a habitat. Loss of biodiversity and increases in mortality can lead to increases in disease and endangered species.

A complete list of events from 2005-2011 can be found at the end of this document.

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- (3) the objective(s) it is intended to help achieve,
- (4) some general background information,
- (5) the priority level for its implementation (high, moderate, or low),
- (6) potential funding sources, if applicable,

When formulating a Mitigation Action Plan, a wide range of activities should be considered to help achieve the goals of communities and lessen the vulnerability of the participating jurisdictions to the effects of natural hazards. In general, all of these activities fall into one of the following broad categories of mitigation techniques. Tables VII-8 and VII-9 shows which jurisdictions have chosen to participate in the proposed actions. Appendix C includes the range of alternatives that were considered in by the Mitigation Advisory Committee.

ACTION #1

Obtain official recognition of the Mitigation Advisory Committee by the Planning District's communities in order to help institutionalize and develop an ongoing mitigation program.

Category: Public Information & Awareness

Hazard: All

Goal(s) Addressed: 4

Background: After the passage of the Disaster Mitigation Act of 2000 (DMA2K), local governments are required to develop and to adopt all hazards mitigation plans to be eligible for certain types of future disaster assistance including funds for mitigation activities. Nationwide, many communities have formed committees, councils or citizen groups to assist in developing and implementing plans. In the case of multi-jurisdictional plans, "mitigation advisory committees" are often formed and are comprised of local officials and residents from the participating jurisdictions. One way to assure the effectiveness of such committees is to bestow official status to them. An officially recognized Mitigation Action Committee will aid each community by sharing the workload on regionally beneficial actions and present a unified voice in dealing with state and FEMA officials. **Priority:** High **Funding Sources:** N/A **Responsibility Assigned to:** MAC and PDC **Target Completion Date:** In progress. August, 2013.

ACTION #2

Target FEMA's Repetitive Loss Properties, and other known repetitively flooded properties, throughout the Planning District for potential mitigation projects.

Category: Property Protection

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Hazard: Flood

Goal(s) Addressed: 1, 3

Background: Currently, over 40,000 of the four million properties insured under the National Flood Insurance Program have been identified by FEMA as repetitive loss properties. The known repetitive loss properties are those that have sustained flood damage and received flood insurance claim payments on multiple occasions. Repetitive loss properties, though they represent a minority of the active policies, represent the majority of claims made to the National Flood Insurance Program. In addition to these properties, there are also a number of properties throughout the planning district that are repetitively flooded yet the property owners do not carry flood insurance, so therefore would not appear on FEMA's repetitive loss properties list. Efforts should be made to identify these properties and determine the most effective mitigation approach (e.g., acquisition, relocation, elevation). **Priority:** High

Funding Sources: FEMA's Pre-Disaster Mitigation (PDM) program, Hazard Mitigation Grant Program (HMGP) and Flood Mitigation Assistance (FMA) program

Responsibility Assigned to: Mitigation Advisory Committee and Planning District Commission
Target Completion Date: In progress. Some localities are aware of repetitive loss properties. Lack of Funding

ACTION #3

Undertake educational outreach activities by developing and distributing brochures and education materials for FEMA's Repetitive Loss Properties with specific mitigation measures emphasizing acquisition, relocation and elevation.

Category: Public Education and Awareness

Hazard: Flood **Goal(s) Addressed:** 3

Background: The Planning District has several repetitive loss properties which have been identified by FEMA. Although an acquisition program for flood-prone properties has been undertaken in the state previously, local citizens are reluctant to relocate from an area where they have strong family and community ties. Citizens should be educated about the flood loss cycle associated with flood-prone areas and encouraged to work with local government officials to develop mutually agreeable strategies to address repetitive losses in the Planning District.

Priority: High

Funding Sources: FEMA, VDEM

Responsibility Assigned to: MAC, PDC and local emergency management agencies

Target Completion Date: In progress. Educational materials will be made available to the public on websites.

ACTION #4

Publicize the Virginia Department of Forestry's *Money for Mitigation Program*. Utilize existing wildfire maps to prioritize project areas in the Planning District.

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SECTION VII. MITIGATION STRATEGY

The Mitigation Advisory Committee discussed the results of the hazard identification and risk assessment, review mitigation goals and objectives based on the priority areas and hazard types, discuss community strengths and weaknesses, and begin developing the mitigation strategy.

This section of the Hazard Mitigation Plan describes the most challenging part of any such planning effort - the development of a mitigation strategy. It is a process of:

1. Setting mitigation goals,
2. Considering mitigation alternatives,
3. Developing objectives and implementation approaches, and
4. Deriving a mitigation action plan.

Essentially these four elements comprise this mitigation strategy.

Setting Mitigation Goals

The hazard mitigation planning process followed by the MAC is a typical problem-solving methodology:

- Describe the problem (Hazard Identification),
- Estimate the impacts the problem could cause (Vulnerability Assessment),
- Assess what safeguards already exist that could/should lessen those impacts (Capability Assessment), and
- Using this information, determine if you should do something (Determine Acceptable Risk), and if so, what that something should be (Develop an Action Plan).

When a community decides that certain risks are unacceptable and that certain mitigation actions may be achievable, the development of *goals* and *actions* takes place. Goals and actions help to describe what should occur, using increasingly more narrow descriptors. Initially, broad-based goals are developed, which are long-term and general statements. Goals are accomplished by implementing actions, which are very detailed and achievable in a finite time period.

The MAC reviewed goals for this plan that were set by the original Hazard Mitigation Plan. General goals remained primarily the same as the initial tone and direction for the overall plan as well. Goals were revisited to confirm that the updated data collection process supported them. Lastly, actions were developed as a logical extension of the plan's objectives. Most of these actions are dynamic and can change. These actions have been utilized to develop a Mitigation Action Plan for the Planning District.

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Hazard Mitigation Plan**

Hazard: Flood

Goal(s) Addressed: 1, 3

Background: Currently, over 40,000 of the four million properties insured under the National Flood Insurance Program have been identified by FEMA as repetitive loss properties. The known repetitive loss properties are those that have sustained flood damage and received flood insurance claim payments on multiple occasions. Repetitive loss properties, though they represent a minority of the active policies, represent the majority of claims made to the National Flood Insurance Program. In addition to these properties, there are also a number of properties throughout the planning district that are repetitively flooded yet the property owners do not carry flood insurance, so therefore would not appear on FEMA's repetitive loss properties list. Efforts should be made to identify these properties and determine the most effective mitigation approach (e.g., acquisition, relocation, elevation). **Priority:** High

Funding Sources: FEMA's Pre-Disaster Mitigation (PDM) program, Hazard Mitigation Grant Program (HMGP) and Flood Mitigation Assistance (FMA) program

Responsibility Assigned to: Mitigation Advisory Committee and Planning District Commission
Target Completion Date: In progress. Some localities are aware of repetitive loss properties. Lack of Funding

ACTION #3

Undertake educational outreach activities by developing and distributing brochures and education materials for FEMA's Repetitive Loss Properties with specific mitigation measures emphasizing acquisition, relocation and elevation.

Category: Public Education and Awareness

Hazard: Flood Goal(s) Addressed: 3

Background: The Planning District has several repetitive loss properties which have been identified by FEMA. Although an acquisition program for flood-prone properties has been undertaken in the state previously, local citizens are reluctant to relocate from an area where they have strong family and community ties. Citizens should be educated about the flood loss cycle associated with flood-prone areas and encouraged to work with local government officials to develop mutually agreeable strategies to address repetitive losses in the Planning District.

Priority: High

Funding Sources: FEMA, VDEM

Responsibility Assigned to: MAC, PDC and local emergency management agencies

Target Completion Date: In progress. Educational materials will be made available to the public on websites.

ACTION #4

Publicize the Virginia Department of Forestry's *Money for Mitigation Program*. Utilize existing wildfire maps to prioritize project areas in the Planning District.

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Assist local residents, in priority areas, to reduce wildfire hazards through the use of funding from the *Money for Mitigation Program*.

Category: Public Education and Awareness

Hazard: Fire **Goal(s) Addressed:** 1

Background: Financial assistance to reduce fire hazards has been established at the Virginia Department of Forestry. The program provides a 50% cost share funds to reduce wildfire fuels, particularly in wildland-urban interface areas. Citizen's groups and homeowner's associations are eligible applicants. A program description including eligibility criteria can be accessed at the agency's website www.vdof.org.

Priority: High

Funding Sources: Virginia Department of Forestry

Responsibility Assigned to: MAC, PDC and local emergency management agencies.

Target Completion Date: In progress. Will publicize on website.

ACTION #5

Develop a comprehensive compilation of landslide activity in the Planning District to be used as a planning tool for future infrastructure projects.

Category: Prevention

Hazard: Landslide

Goal(s) Addressed: 2

Background: Landslide activity is prevalent in the mountainous regions of the Planning District. Most often, roadways are impacted by landslide events. The Virginia Department of Transportation and local government road and bridge departments usually respond to events on an as-needed basis. A compilation of landslide activity, both past and present, can assist decision-makers as a planning tool when determining where to cite new and upgraded infrastructure.

Priority: High

Funding Sources: VDOT and local public works departments/agencies

Responsibility Assigned to: MAC, PDC and local public works departments/agencies

Target Completion Date: Not started. Have been unable to obtain this information from localities.

ACTION #6

Evaluate the Planning District's community flood plain ordinances and enforcement procedures that may be outdated for possible upgrades.

Category: Prevention

Hazard: Flood **Goal(s)**

Addressed: 3

Background: Each county and community in the planning district has adopted and enforces the NFIP floodplain management regulations. By utilizing the working

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relationship established by the formalization of the Mitigation Action Committee communities can share information on the state of current regulations as well as enforcement procedures. By sharing this information communities can learn from one another on ways to best implement, monitor, and enforce NFIP regulations and over all floodplain management. **Priority:** Moderate **Funding Sources:** N/A
Responsibility Assigned to: Planning District communities' floodplain managers
Target Completion Date: In progress. Will be completed by 2015.

ACTION #7

Initiate discussion concerning which individuals shall be designated as the Floodplain Manager in each of the four Planning District's jurisdictions. MAC and PDC will make recommendations to the appropriate decision-makers in each jurisdiction.

Category: Prevention

Hazard: All

Goal(s) Addressed: 3

Background: Over nineteen thousand communities participate in the National Flood Insurance Program (NFIP) and have adopted floodplain ordinances that specify the designation of a local floodplain official or administrator. In many cases, the local floodplain administrator is either 1) an individual with little or no experience about flooding and the NFIP, or 2) an individual with many responsibilities. Buchanan, Dickenson, Russell and Tazewell Counties have adopted floodplain ordinances and designated a local floodplain administrator. A review of these individual's responsibilities, not just floodplain administration, can assist local decision-makers in the effective allocation of personnel resources and funding.

Priority: Moderate

Funding Sources: N/A

Responsibility Assigned to: MAC,PDC and local government decision-makers including county commissions.

Target Completion Date: In progress. To be completed by August, 2013.

ACTION #8

Initiate discussions with public utility companies about incorporating mitigation as infrastructure is laid, maintained, or repaired. Invite utilities to make a presentation to the MAC to begin dialogue.

Category: Prevention

Hazard: All

Goal(s) Addressed: 2

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Background: Mitigation initiatives that protect utility infrastructure can most often be installed at the beginning of a project for much less money than if installed as a retrofitting project after the fact. Many utility companies have the financial capacity and desire to protect their facilities from the impacts of natural hazards but are often unaware of the risk until an event occurs. Local governments can serve to educate the companies about the risk of natural hazards and provide technical guidance and references about hazard proofing their facilities.

Priority: High

Funding Sources: FEMA; VDEM, VDC

Responsibility Assigned to: MAC, PDC, local public works departments/agencies, emergency management agencies and area Chambers of Commerce

Target Completion Date: Not started. Low priority of localities.

ACTION #9

Develop and distribute a brochure targeting the Planning District jurisdiction's community staff, which details mitigation principles and options.

Category: Public Information and Awareness

Hazard: All

Goal(s) Addressed: 4, 6

Background: Local governmental staff should be educated about the benefits of natural hazard mitigation and encouraged to incorporate the principles into the decision-making processes related to their jobs. Information on potential mitigation measures, as well as potential funding sources and partnering opportunities, should be shared with all appropriate local staff. **Priority:** Moderate

Funding Sources: FEMA, NWS, VDEM, VDC

Responsibility Assigned to: MAC, PDC and local emergency management agencies.

Target Completion Date: In progress. Website link will be given to local government through PDC website.

ACTION #10

Develop "hazard information centers" on the Planning District's community's websites and in public libraries where individuals can find hazard and mitigation information.

Category: Public Information and Awareness

Hazard: All

Goal(s) Addressed: 6

Background: As the Internet continues to become "the information super highway", more local governments around the country are using it as a primary means of official communication with community residents through the development and administration of websites. Today, many residents pay their water and power bills online, register to vote and even obtain driver's licenses over the Internet. Use of local government

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websites to educate community residents about natural hazards and mitigation opportunities is growing nationwide.

Priority: Moderate

Funding Sources: Local government annual budgets for information technology

Responsibility Assigned to: Planning District community's local government communications departments/offices, the MAC and PDC.

Target Completion Date: In progress. The four counties will be asked to incorporate info on their websites.

ACTION #11

Investigate the benefits of submitting Community Rating System Applications for non-participating jurisdictions.

Category: Prevention

Hazard: All

Goal(s) Addressed: 3

Background: Communities that regulate development in floodplains are able participate in the National Flood Insurance Program (NFIP). In return, the NFIP makes federally-backed flood insurance policies available for properties in the community. The Community Rating System (CRS) was implemented in 1990 as a program for recognizing and encouraging community floodplain management activities that exceed the minimum NFIP standards. There are ten CRS classes: Class 1 requires the most credit points and gives the largest premium reduction (45%); class 10 receives no premium reduction. Each class, starting with Class 9, receives at least a 5% premium reduction. MAC members should be educated on the benefits of participation of CRS, so that each community may potentially submit a CRS application.

Priority: Medium

Funding Sources: Local government department budgets

Responsibility Assigned to: MAC, PDC, local government planning departments work with the State NFIP Coordinator at the VDC

Target Completion Date: Not started, Lack of funding.

ACTION #12

Investigate all critical facilities to evaluate their resistance to wind, fire, landslide and flood hazards. This study will examine all critical facilities within the Planning District communities and make recommendations as to ways in which the facilities can be strengthened or hardened.

Category: Public Information and Awareness

Hazard: All

Goal(s) Addressed: 2

Background: The ability to recover quickly after a disaster rests, in part, on the community's ability to maintain critical functions during response and recovery. Efforts should be undertaken to ensure that community critical facilities (e.g., fire departments, hospitals, schools) can withstand the impact of various hazards. Local facilities

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management offices/agencies and local emergency management agencies will work with the MAC and PDC to undertake a future study with recommendations for improvements. In order to finance this initiative, the MAC and PDC will submit a Pre-Disaster Mitigation (PDM) program grant application to the Virginia Department of Emergency Management.

Priority: Moderate

Funding Sources: FEMA, VDEM

Responsibility Assigned to: MAC, PDC, local facilities management agencies and local emergency management agencies

Target Completion Date: Not started. Lack of funding.

ACTION #13

Support Public Works initiatives to improve stormwater infrastructure throughout the area.

Category: Structural Projects

Hazard: Flood

Goal(s) Addressed: 2, 4

Background: Many times, local stormwater channels are not identified on FEMA Flood Insurance Rates Maps (FIRMs). Consequently, stormwater hazards are often overlooked as natural hazards although they can cause significant problems during times of high water. Many jurisdictions do not regulate stormwater runoff, thereby, increasing flood damage potential during an event.

Priority: Medium

Funding Sources: EPA, USACE, FEMA

Responsibility Assigned to: MAC, PDC and local public works departments

Target Completion Date: In progress. Low priority.

ACTION #14

"Verify the geographic location of all NFIP repetitive losses, and make inquiries as to whether the properties have been mitigated, and if so, by what means."

Category: Prevention

Hazard: Flood

Goal(s): 2

Background: By keeping track of NFIP repetitive losses we can eliminate or reduce damage to properties that are caught in the flood-repair-flood-repair cycle and sustain actions that reduce vulnerability and risk from hazards, or reduce the severity of the effects of hazards on people and property.

Priority: Medium

Funding Sources: Local

Responsibility Assigned to: PDC\MAC

Target Completion Date: In progress. Will be completed in 2014.

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Action Item	Buchanan County	Dickenson County	Russell County	Tazewell County
1	X	X	X	X
2	X	X	X	X
3	X	X	X	X
4	X	X	X	X
5	X	X	X	X
6	X	X	X	X
7	X	X	X	X
8	X	X	X	X
9	X	X	X	X
10	X	X	X	X
11	X	X	X	X
12	X	X	X	X
13	X	X	X	X

Action Item	Town of Bluefield	Town of Cedar Bluff	Town of Cleveland	Town of Clinchco	Town of Grundy	Town of Haysi	Town of Honaker	Town of Lebanon	Town of Pocahontas	Town of Richlands	Town of Tazewell
1	X		X		X	X	X	X	X	X	X
2	X		X		X	X		X		X	X
3	X									X	X
4	X									X	X
5											
6											
7											
8											
9	X	X	X	X	X	X	X	X	X	X	X
10	X	X	X	X	X	X	X	X	X	X	X
11											
12	X										
13	X						X	X		X	X

* Contingent upon funding

**Cumberland Plateau Planning District Commission
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SECTION VI. CAPABILITY ASSESSMENT

Introduction

This portion of the Plan assesses the Cumberland Plateau Planning District's current capacity to mitigate the effects of the natural hazards identified in Section V of the plan. This assessment includes a comprehensive examination of the following local government capabilities:

1. *Staff and Organizational Capability*
2. *Technical Capability*
3. *Fiscal Capability*
4. *Policy and Program Capability*
5. *Legal Authority*
6. *Political Willpower*

The purpose of conducting the capabilities assessment is to identify potential hazard mitigation opportunities available to the Cumberland Plateau Planning District's local governments including the Counties of Buchanan, Dickenson, Russell and Tazewell. Careful analysis should detect any existing gaps, shortfalls, or weaknesses within existing governmental activities that could exacerbate a community's vulnerability. The assessment also will highlight the positive measures already in place or being done at the County level, which should continue to be supported and enhanced, if possible, through future mitigation efforts.

The capabilities assessment serves as the foundation for designing an effective hazard mitigation strategy. It not only helps establish the goals and objectives for the Planning District to pursue under this Plan, but assures that those goals and objectives are realistically achievable under given local conditions.

This section of the plan is divided into four parts, each of which is a brief profile of the capabilities of the participating jurisdictions. The following table summarizes the plans and ordinances of each jurisdiction that can support hazard mitigation goals and strategies.

Table VI-1 — Capability Matrix - Plans and Ordinances

Plan or Ordinance	Buchanan County	Dickenson County	Russell County	Tazewell County
Building Code	X	X	X	X
Capital Improvements Plan or Program				
Comprehensive Land Use Plan	X	X	X	X
Emergency Operations Plan	X	X	X	
Floodplain		X	X	X

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Management Ordinance				
Floodplain Management Plan				
Land Use Regulation				
Local Hazard Mitigation Plan				
Open Space Plan				
Stormwater Management Plan				
Stormwater Ordinance				
Subdivision Ordinance	X	X	X	X
Watershed Protection Plan				
Zoning Ordinance				

Buchanan County

1. Staff and Organizational Capability

Buchanan County has limited staff and organizational capability to implement hazard mitigation strategies. Buchanan County is governed by a seven-member Board of Supervisors. The members represent the seven districts into which the county is divided. There is also a County Administrator. The Board bears the responsibility of serving the people and improving the quality of life in the County. The business of the County is conducted through the department and board system. There are eight (8) county departments and twenty-nine (29) boards and commissions.

Those professional staff departments and boards are as follows:

- Board Of Election Commissioners
- Legal Department
- Fire Department
- Sheriff's Department
- Public Works Department
- Board Of Building Code Appeals
- Black Diamond R C & D Council
- Coal Haul Road And Gas Improvements Adv. Committee
- Cumberland Mountain Community Service Board
- Cumberland Plateau Planning District
- Cumberland Plateau Regional Waste Management Authority
- Disability Service Board
- Emergency Services
- Finance Committee
- Buchanan General Hospital Board
- Industrial Development Authority
- Insurance Committee
- John Flannagan Water Authority
- Parks And Recreation Board
- Personnel Committee
- Planning Commission
- Buchanan County Public Library
- Public Service Authority
- Buchanan County Public School
- Social Services Advisory Board

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management operations. Buchanan County does currently have GIS capability to further hazard mitigation goals.

2.C. Internet Access

Buchanan County does provide some of its critical employees with high-speed broadband Internet service. Internet access provides an enormous opportunity for local officials to keep abreast of the latest information relative to their work and makes receiving government services more affordable and convenient. Information technology also offers increased economic opportunities, higher living standards, more individual choices, and wider and more meaningful participation in government and public life. Simply put, information technology can make distance - a major factor for County officials and residents - far less important than it used to be. It is believed that Internet access will help further the community's hazard mitigation awareness programs, but should be supplemented with more traditional (and less technical) means as well.

3. Fiscal Capability

Buchanan County has limited fiscal capability to implement hazard mitigation strategies. For Fiscal Year 2012, the County has a public safety budget of \$47,609,000. The County receives most of its revenues through State and Local sales tax and other local services and through restricted intergovernmental contributions (federal and state pass through dollars). Considering the current budget deficits at both the State and local government level, in Virginia, combined with the apparent increased reliance on local accountability by the Federal government, this is a significant and growing concern for Buchanan County.

4. Policy and Program Capability

This part of the capabilities assessment includes the identification and evaluation of existing plans, policies, practices, programs, or activities that either increase or decrease the community's vulnerability to natural hazards. Positive activities, which decrease hazard vulnerability, should be sustained and enhanced if possible. Negative activities, which increase hazard vulnerability, should be targeted for reconsideration and be thoroughly addressed within Mitigation Strategy for Buchanan County.

4.A. Recent Hazard Mitigation Efforts

Buchanan County received emergency funding from the VA Department of Housing in 2002 for major flooding in the Hurley community.

Buchanan County has received these same funds from 2002 to current. In all approximately 100 houses have been removed and replaced or rehabilitated that were damaged during the flooding of 2002. Homes were either moved or built up out of the flood plain in the Hurley area. In all \$2,275,000.00 has been received during the Hurley Flood Recovery Projects.

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The County has a person responsible for Information Technology (IT) which can enhance local government operations and the community's ability to develop and maintain a state-of-the art hazard mitigation program.

2.B. Geographic Information Systems (GIS)

GIS systems can best be described as a set of tools (hardware, software and people) used to collect, manage, analyze and display spatially-referenced data. Many local governments are now incorporating GIS systems into their existing planning and management operations. Dickenson County has existing GIS capability to further hazard mitigation goals.

2.C. Internet Access

Dickenson County provides its employees with high speed broadband Internet service. Internet access provides an enormous opportunity for local officials to keep abreast of the latest information relative to their work and makes receiving government services more affordable and convenient. Information technology also offers increased economic opportunities, higher living standards, more individual choices, and wider and more meaningful participation in government and public life. Simply put, information technology can make distance - a major factor for County officials and residents - far less important than it used to be. It is believed that Internet access will help further the community's hazard mitigation awareness programs, but should be supplemented with more traditional and less technical means as well.

3. Fiscal Capability

Dickenson County has limited fiscal capability to implement hazard mitigation strategies. For Fiscal Year 2012, the County has a public safety budget of \$3,647,242.00. The county receives most of its revenues through state and local sales tax and other local services and through restricted intergovernmental contributions (federal and state pass through dollars). Considering the current budget deficits at both the state and local government level, in Virginia, combined with the apparent increased reliance on local accountability by the federal government, this is a significant and growing concern for Dickenson County.

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4.A. Recent Hazard Mitigation Efforts

Dickenson County is currently participating in a U.S. Corps of Engineers project to evaluate all structures in the flood plain zone. The school consolidation project is receiving funds through this agreement. Ervinton High, Clinchco Elementary, Sandlick Elementary and some buildings at Haysi High will be demolished and new facilities constructed outside of the floodplain. Between 200 and 300 homes/business are identified as being eligible also.

4.B. Community Rating System Activities

Communities that regulate development in floodplains are able participate in the National Flood Insurance Program (NFIP). In return, the NFIP makes federally-backed flood insurance policies available for properties in the community. The Community Rating System (CRS) was implemented in 1990 as a program for recognizing and encouraging community floodplain management activities that exceed the minimum NFIP standards. There are ten CRS classes: class 1 requires the most credit points and gives the largest premium reduction; class 10 receives no premium reduction.

Dickenson County does not participate in the Community Rating System.

4.C. Emergency Operations Plan

Dickenson County has developed and adopted a Comprehensive Emergency Management Plan, which predetermines actions to be taken by government agencies and private organizations in response to an emergency or disaster event. For the most part, the Plan describes the County's capabilities to respond to emergencies and establishes the responsibilities and procedures for responding effectively to the actual occurrence of a disaster. The Plan does not specifically address hazard mitigation, but it does identify the specific operations to be undertaken by the County to protect lives and property immediately before, during and immediately following an emergency. There are no foreseeable conflicts between this Hazard Mitigation Plan and Dickenson County's Comprehensive Emergency Management Plan, primarily because they are each focused on two separate phases of emergency management (mitigation vs. preparedness and response). The Plan does identify the Board of Supervisors as having lead role in the long-term reconstruction phase following a disaster - which presents a unique window of opportunity for implementing hazard mitigation strategies. However, none are specified within the Emergency Management Plan.

4.D. Floodplain Management Plan

Dickenson County does not currently have a separate floodplain management plan for purposes of the National Flood Insurance Program's Community Rating System (CRS). This plan is intended to fulfill the CRS planning requirement should the City decide to enter the CRS.

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The County has a person responsible for Information Technology (IT) which can enhance local government operations and the community's ability to develop and maintain a state-of-the art hazard mitigation program.

2.B. Geographic Information Systems (GIS)

GIS systems can best be described as a set of tools (hardware, software and people) used to collect, manage, analyze and display spatially-referenced data. Many local governments are now incorporating GIS systems into their existing planning and management operations. Dickenson County has existing GIS capability to further hazard mitigation goals.

2.C. Internet Access

Dickenson County provides its employees with high speed broadband Internet service. Internet access provides an enormous opportunity for local officials to keep abreast of the latest information relative to their work and makes receiving government services more affordable and convenient. Information technology also offers increased economic opportunities, higher living standards, more individual choices, and wider and more meaningful participation in government and public life. Simply put, information technology can make distance - a major factor for County officials and residents - far less important than it used to be. It is believed that Internet access will help further the community's hazard mitigation awareness programs, but should be supplemented with more traditional and less technical means as well.

3. Fiscal Capability

Dickenson County has limited fiscal capability to implement hazard mitigation strategies. For Fiscal Year 2012, the County has a public safety budget of \$3,647,242.00. The county receives most of its revenues through state and local sales tax and other local services and through restricted intergovernmental contributions (federal and state pass through dollars). Considering the current budget deficits at both the state and local government level, in Virginia, combined with the apparent increased reliance on local accountability by the federal government, this is a significant and growing concern for Dickenson County.

4. Policy and Program Capability

This part of the capabilities assessment includes the identification and evaluation of existing plans, policies, practices, programs, or activities that either increase or decrease the community's vulnerability to natural hazards. Positive activities, which decrease hazard vulnerability, should be sustained and enhanced if possible. Negative activities, which increase hazard vulnerability, should be targeted for reconsideration and be thoroughly addressed within Mitigation Strategy for Dickenson County.

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4.A. Recent Hazard Mitigation Efforts

Dickenson County is currently participating in a U.S. Corps of Engineers project to evaluate all structures in the flood plain zone and implement a flood warning system.

4.B. Community Rating System Activities

Communities that regulate development in floodplains are able to participate in the National Flood Insurance Program (NFIP). In return, the NFIP makes federally-backed flood insurance policies available for properties in the community. The Community Rating System (CRS) was implemented in 1990 as a program for recognizing and encouraging community floodplain management activities that exceed the minimum NFIP standards. There are ten CRS classes: class 1 requires the most credit points and gives the largest premium reduction; class 10 receives no premium reduction.

Dickenson County does not participate in the Community Rating System.

4.C. Emergency Operations Plan

Dickenson County has developed and adopted a Comprehensive Emergency Management Plan, which predetermines actions to be taken by government agencies and private organizations in response to an emergency or disaster event. For the most part, the Plan describes the County's capabilities to respond to emergencies and establishes the responsibilities and procedures for responding effectively to the actual occurrence of a disaster. The Plan does not specifically address hazard mitigation, but it does identify the specific operations to be undertaken by the County to protect lives and property immediately before, during and immediately following an emergency. There are no foreseeable conflicts between this Hazard Mitigation Plan and Dickenson County's Comprehensive Emergency Management Plan, primarily because they are each focused on two separate phases of emergency management (mitigation vs. preparedness and response). The Plan does identify the Board of Supervisors as having lead role in the long-term reconstruction phase following a disaster - which presents a unique window of opportunity for implementing hazard mitigation strategies. However, none are specified within the Emergency Management Plan.

4.D. Floodplain Management Plan

Dickenson County does not currently have a separate floodplain management plan for purposes of the National Flood Insurance Program's Community Rating System (CRS). This plan is intended to fulfill the CRS planning requirement should the City decide to enter the CRS.

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4.E. Stormwater Management Plan

Dickenson County does not currently have an adopted stormwater management plan, but does apply stormwater management provisions through their subdivision regulations. Lands subject to flooding, irregular drainage conditions, excessive erosion and other reasons unsuitable for residential use shall not be platted for residential use unless the hazards can be and are corrected. For major subdivisions, a stormwater drainage plan must be prepared and necessary stormwater drainage improvements must be completed before final plat approval.

4.F. Comprehensive Plan

Dickenson County developed and adopted a Comprehensive Plan in 2008. The plan provides the future vision for the community regarding growth and development. Hazard mitigation planning is not specifically addressed in the plan.

4.G. Ordinances

Dickenson County has adopted several ordinances that are relevant to hazard mitigation. The following table provides an inventory of these ordinances.

Table VI-2 — Dickenson County Ordinances Related to Hazard Mitigation

Title(s)	Adoption Date(s)	Description/Purpose(s)	Mitigation Effectiveness
Flood Damage Prevention and Control Ordinance	1/23/91	The Flood Damage Prevention Ordinance is designed to minimize public and private losses due to flood conditions in specific areas. It requires a development permit be submitted to the County prior to any construction or substantial improvement activities. Permits will only be approved if they meet the provisions of the ordinance, which include development standards that will minimize the potential for flood losses. Standards are established for construction materials, equipment, methods, practices and uses. Most importantly, establishes the requirements for elevation and floodproofing (non-residential) to base flood elevation. The Ordinance requires the minimum standards of the National Flood Insurance Program (NFIP). The	HIGH

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3. Fiscal Capability

Russell County has limited fiscal capability to implement hazard mitigation strategies. For Fiscal Year 2012, the County has a public safety budget of \$4,463,848.00. The county receives most of its revenues through state and local sales tax and other local services and through restricted intergovernmental contributions (federal and state pass through dollars). Considering the current budget deficits at both the state and local government level, in Virginia, combined with the apparent increased reliance on local accountability by the federal government, this is a significant and growing concern for Russell County.

4. Policy and Program Capability

This part of the capabilities assessment includes the identification and evaluation of existing plans, policies, practices, programs, or activities that either increase or decrease the community's vulnerability to natural hazards. Positive activities, which decrease hazard vulnerability, should be sustained and enhanced if possible. Negative activities, which increase hazard vulnerability, should be targeted for reconsideration and be thoroughly addressed within the Mitigation Strategy for Russell County.

4.A. Recent Hazard Mitigation Efforts

In the past 5 years, Russell County Emergency Management has only completed one mitigation project in Maple Gap. The project replace a failed drained pipe at the lower end of Maple Gap, which caused flooding during heavy rainfall events when the excess water was not allowed to flow through the drain pipe and back up into nearby homes.

4.B. Community Rating System Activities

Communities that regulate development in floodplains are able participate in the National Flood Insurance Program (NFIP). In return, the NFIP makes federally-backed flood insurance policies available for properties in the community. The Community Rating System (CRS) was implemented in 1990 as a program for recognizing and encouraging community floodplain management activities that exceed the minimum NFIP standards. There are ten CRS classes: class 1 requires the most credit points and gives the largest premium reduction; class 10 receives no premium reduction.

Russell County does not participate in the Community Rating System.

4.C Emergency Operations Plan

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Tazewell County has limited technical capability to implement hazard mitigation strategies.

2.A. Technical Expertise

The County does have a full-time planner on staff to administer the community's hazard mitigation programs. The County Engineer provides expertise in the area of water resources and associated technical work. The County does have an inspections office which enforces a building code.

The County has a person responsible for Information Technology (IT), which can enhance local government operations and the community's ability to develop and maintain a state-of-the art hazard mitigation program.

2.B. Geographic Information Systems (GIS)

GIS systems can best be described as a set of tools (hardware, software and people) used to collect, manage, analyze and display spatially-referenced data. Many local governments are now incorporating GIS systems into their existing planning and management operations. Tazewell County has GIS capability and a person responsible for maintaining/implementing the GIS to further hazard mitigation goals.

2.C. Internet Access

Tazewell County does provide most of its employees with high speed broadband Internet service. Internet access provides an enormous opportunity for local officials to keep abreast of the latest information relative to their work and makes receiving government services more affordable and convenient. Information technology also offers increased economic opportunities, higher living standards, more individual choices, and wider and more meaningful participation in government and public life. Simply put, information technology can make distance - a major factor for County officials and residents - far less important than it used to be. It is believed that Internet access will help further the community's hazard mitigation awareness programs, but should be supplemented with more traditional (and less technical) means as well.

3. Fiscal Capability

Tazewell County has limited fiscal capability to implement hazard mitigation strategies. For Fiscal Year 2012, the County has a public safety budget of \$85,347,000.. The county receives most of its revenues through state and local sales tax and other local services and through restricted intergovernmental contributions (federal and state pass through dollars). Considering the current budget deficits at both the state and local government level, in Virginia, combined with the apparent increased reliance on local accountability by the federal government, this is a significant and growing concern for Tazewell County.

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		by emergency vehicles for fires or severe weather events.	
Tazewell County State of Emergency Ordinance	Unknown	<p>The purpose of this ordinance is to authorize the proclamation of a State of Emergency and the imposition of prohibitions and restrictions during a State of Emergency. Establishes the authority and procedures for the Board of Supervisors to proclaim a State of Emergency, and to impose the following restrictions as described in the ordinance: curfew; evacuation; possession/transportation/transfer of intoxicating liquors, dangerous weapons and substances; access to areas; movements of people in public places; operation of businesses and other places; and other activities or conditions the control of which may be reasonably necessary to maintain order and protect lives or property during the State of Emergency.</p> <p>The ordinance does not incorporate any long-term mitigation actions, such as temporary moratoria on the reconstruction of structures damaged or destroyed by a disaster event.</p>	LOW
Erosion And Sediment Control		<p>The purpose is to conserve the land, water, air and other natural resources of Tazewell County. It establishes requirements for the control of erosion and sedimentation, and establishes procedures whereby these requirements shall be administered and enforced.</p>	MODERATE

4.H. Open Space Plans

Tazewell County does not currently have a separate Open Space Plan.

4.I. Watershed Protection Plan

Tazewell County does not currently have a separate Watershed Protection Plan. However, the Upper Tennessee River Watershed Strategic Plan dated 2000 contains information for the Clinch, Holston and Powell Rivers.

5. Legal Authority

Local governments in Virginia have a wide range of tools available to them for implementing mitigation programs, policies and actions. A hazard mitigation program can utilize any or all of the four broad types of government powers granted by the State of Virginia, which are (a) regulation; (b) acquisition; (c) taxation; and (d) spending. The scope of this local authority is subject to constraints, however, as all of Virginia's political subdivisions must not act without proper delegation from the state. All power is vested in the state and can only be exercised by local governments to the extent it is delegated. Thus, this portion of the capabilities assessment will summarize Virginia's enabling legislation which grants the four types of government powers listed above within the context of available hazard mitigation tools and techniques.

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SECTION VIII — PLAN MAINTENANCE PROCEDURES

The long-term success of the Cumberland Plateau Planning District's mitigation plan depends in large part on routine monitoring, evaluating, and updating of the plan so that it will remain a valid tool for the communities to use. The first step in ensuring that the plan's activities will be implemented is to obtain official recognition of the Mitigation Advisory Committee (MAC) as proposed in Mitigation Action#1 and assign the responsibility to the MAC.

Plan Adoption, Implementation and Maintenance

Formal Plan Adoption

Fifteen local governments in southwestern Virginia have participated in this planning process and formally adopted this plan by resolution of their governing Board. Those local governments are the counties of Buchanan, Dickenson, Russell and Tazewell and the towns of towns of Grundy, Clinchco, Haysi, Cleveland, Honaker, Lebanon, Bluefield, Cedar Bluff, Pocahontas, Richlands and Tazewell. The plan was completed under the auspices of the Cumberland Plateau Planning District.

The adoption process necessitated that the MAC 1) place the plan review and adoption on the appropriate meeting agendas in each jurisdiction, 2) produce and provide copies in official meeting packets, 3) facilitate the actual adoption, 4) collect the adoption resolutions, and 5) incorporate the adopted resolutions into the final Hazard Mitigation Plan.

The Cumberland Plateau Planning District appreciates the willingness that both Virginia Department of Emergency Management and FEMA Region III demonstrated by reviewing this plan concurrently and providing comments for revision *prior* to the adoption process. Not having done so would clearly have added more months to the adoption process.

Implementation

Upon adoption, the plan faces the biggest test: *implementation*. Implementation implies two concepts: action and priority.

While this plan puts forth many worthwhile and "High" priority recommendations, there may be competition among the participating communities in the Cumberland Plateau Planning District for limited mitigation funds. The decision of which action to undertake first will be the primary issue that the district's communities face. Fortunately, there are two factors that will help make that decision workable. First, there are high priority items for each participating community, so each can pursue an action independently. Therefore, the Plan's specific recommendations will begin to be addressed. Second, funding is always an important and critical issue. Therefore whenever possible, the Planning District communities will pursue low or no-cost recommendations.

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An example of a low-cost, high-priority recommendation would be to pursue the education efforts necessary for elected officials and the general public as they relate to participation in the National Flood Insurance Program (NFIP). In other cases, some communities need to strengthen their commitment to the NFIP by amending local floodplain ordinances.

Another example would be to pursue the regional goal of increasing education opportunities for the Planning District communities' employees, MAC representatives, and public officials regarding natural hazard mitigation, floodplain management, floodplain regulations, and enforcement. These initial efforts will lead to long-standing changes in vulnerability and can be initiated at very little cost, while promoting public education through their relative "visibility" in the community.

Another important implementation approach that is highly effective, but low-cost, is to take steps to incorporate the recommendations, and equally important, the underlying principles of this Hazard Mitigation Plan into other community plans and mechanisms, such as:

- Comprehensive Planning
- Capital Improvement Budgeting
- Economic Development Goals and Incentives

Mitigation is most successful when it is incorporated within the day-to-day functions and priorities of government and development. This integration is accomplished by a constant effort to network and to identify and highlight the multi-objective, "win-win" benefits to each program, the communities and their constituents. Just as importantly, the mitigation plan and its recommendations should be presented as a "framework for mitigation" in all future planning efforts undertaken by the district's communities such as the development or revision of local comprehensive plans. This effort is achieved through the often tedious actions of monitoring agendas, attending meetings, sending memos, and promoting safe, sustainable communities.

Since 2005 Russell County has incorporated the 2005 mitigation recommendations into their Comprehensive Development Plan. Buchanan, Dickenson, Russell and Tazewell Counties have incorporated it into their Local Emergency Operations Plans. The PDC will continue to stress the need to integrate with other local community plans.

Simultaneous to these efforts, it will be important to constantly monitor funding opportunities that can be utilized to implement some of the higher cost recommended actions. This will include creating and maintaining a repository of ideas on how any required local match or participation requirement can be met. Then, when funding does become available, the Cumberland Plateau Planning District communities will be in a position to take advantage of an opportunity. Funding opportunities that can be monitored include special pre- and post-disaster funds, special district budgeted funds, state or federal ear-marked funds, and grant programs, including those that can serve or support multi-objective applications.

Figure 3.12-1: Landslide Incidence and Susceptibility

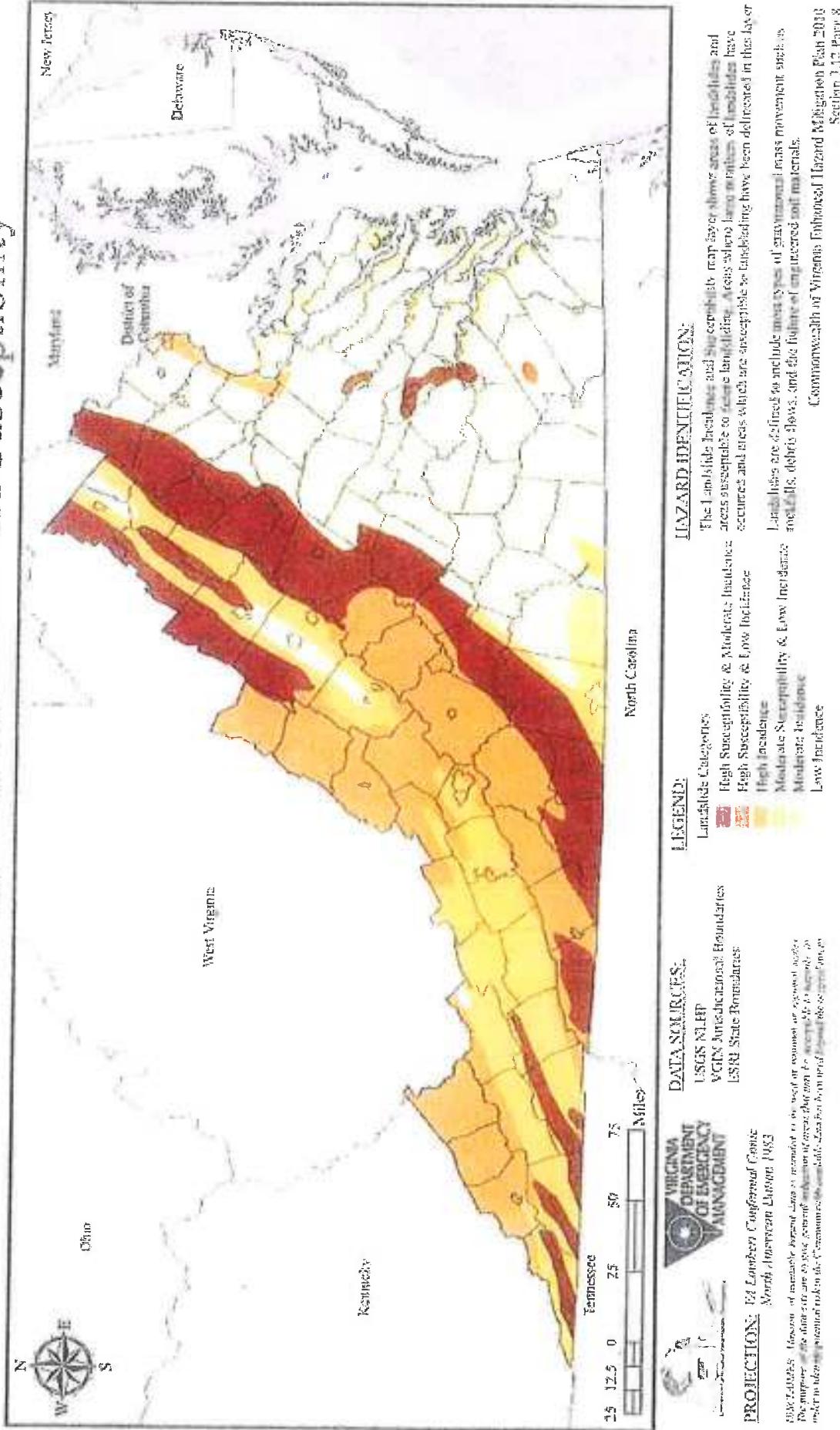


Figure 3.11-1: VDOF Statewide Wildfire Risk Assessment

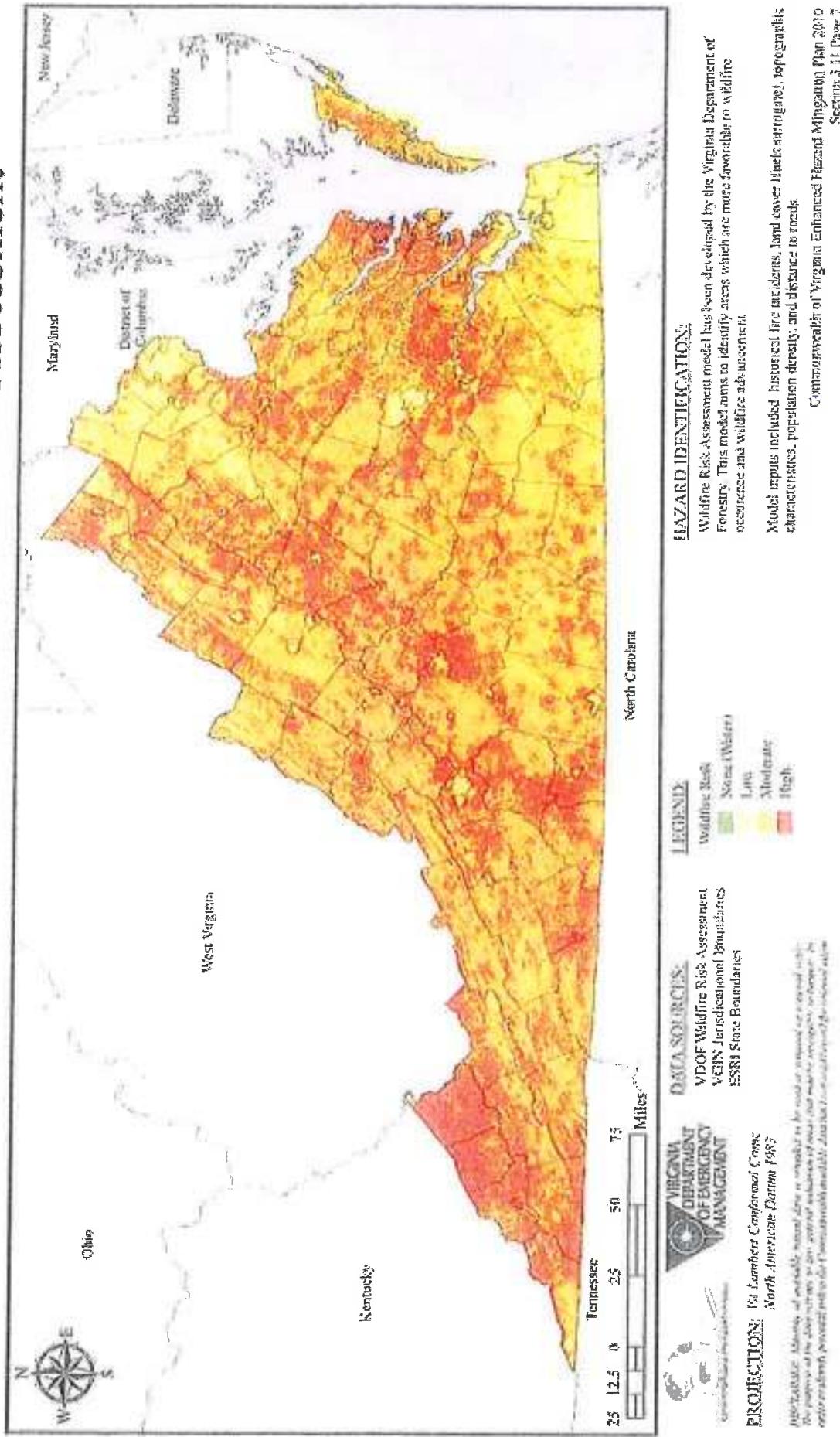


Figure 3.3-8: Landslide Federal Declared Disasters

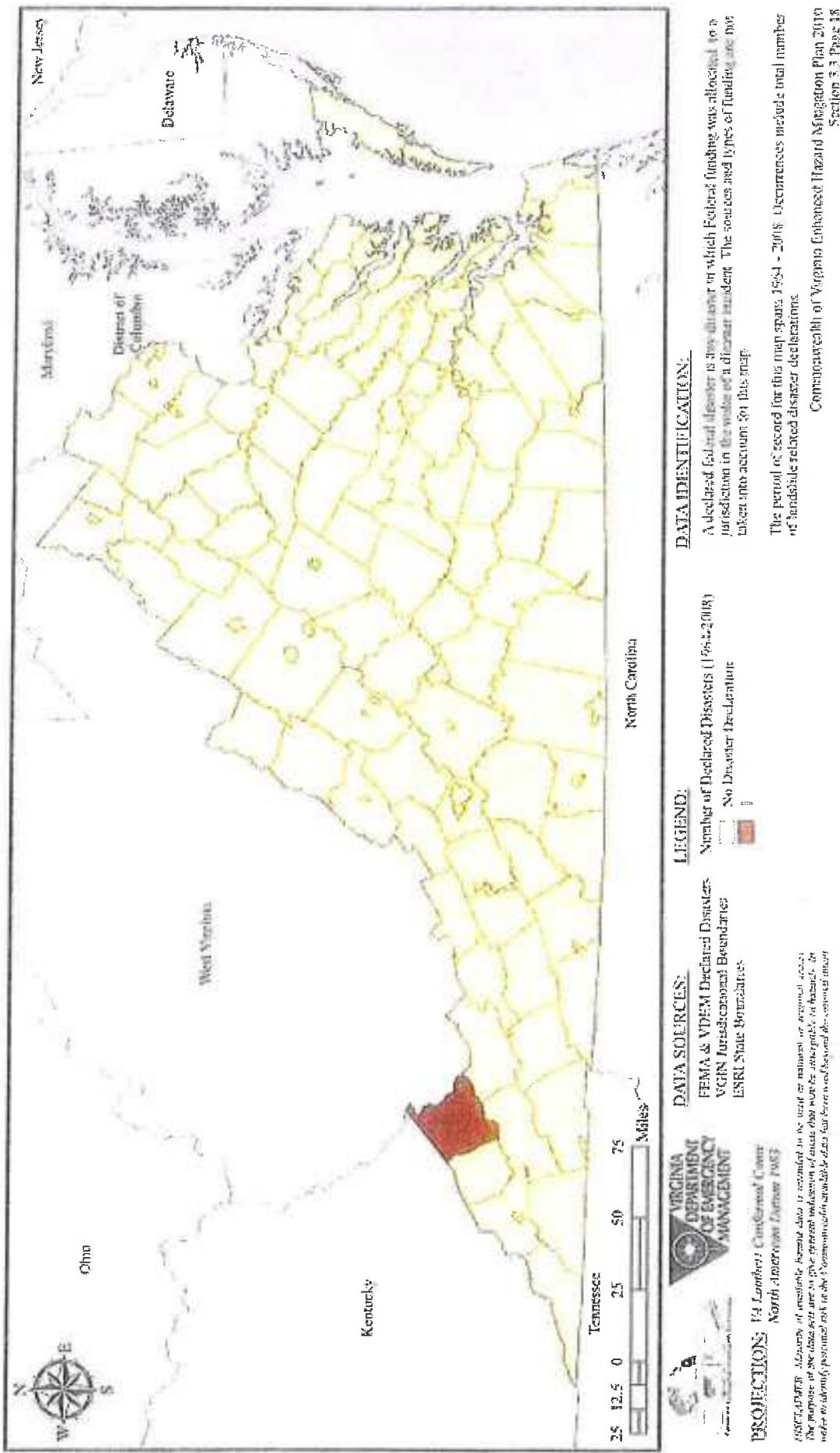


Figure 3.3-6: Winter Storm Federal Declared Disasters

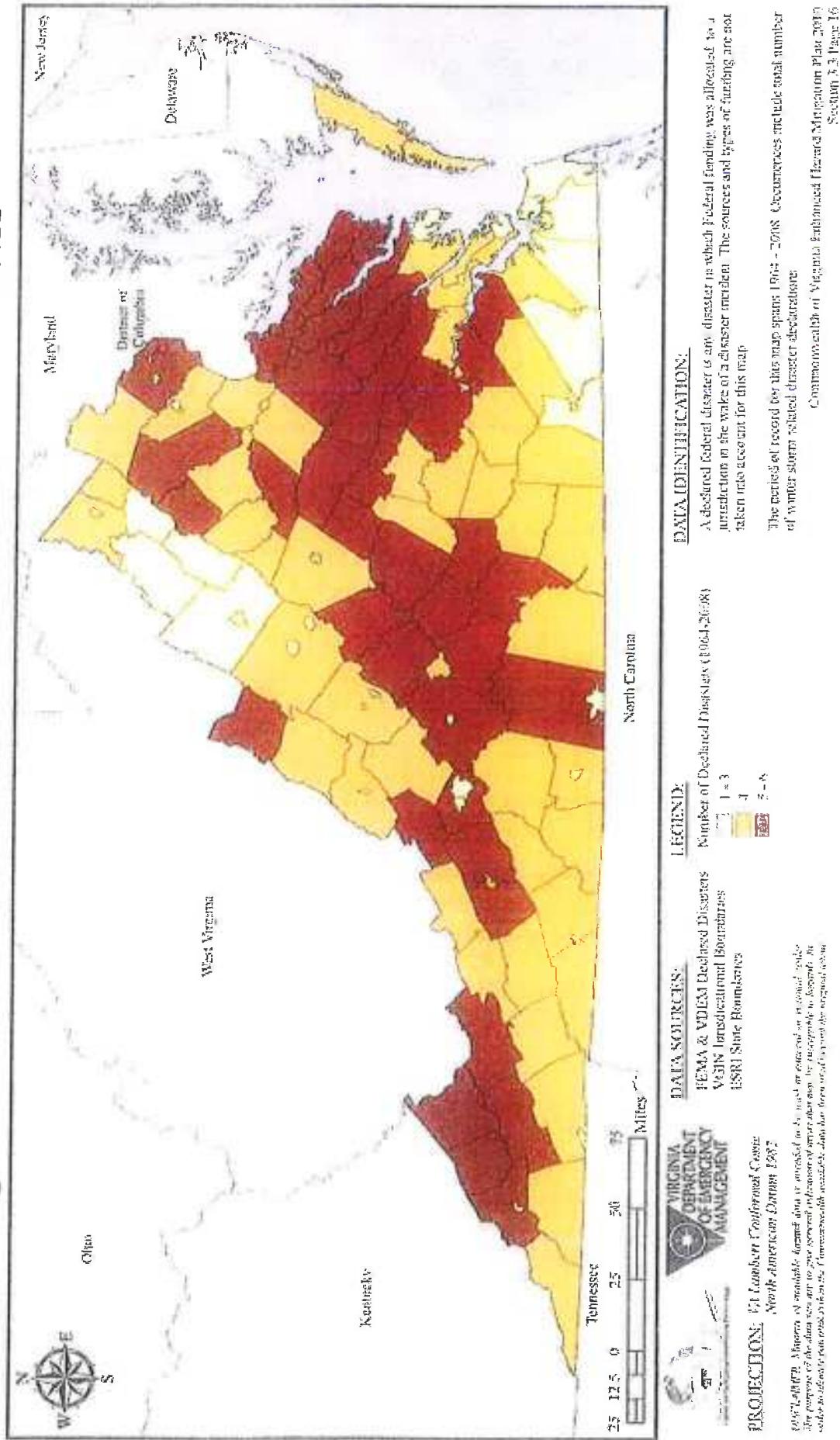


Figure 3.3-5: Tornado Federal Declared Disasters

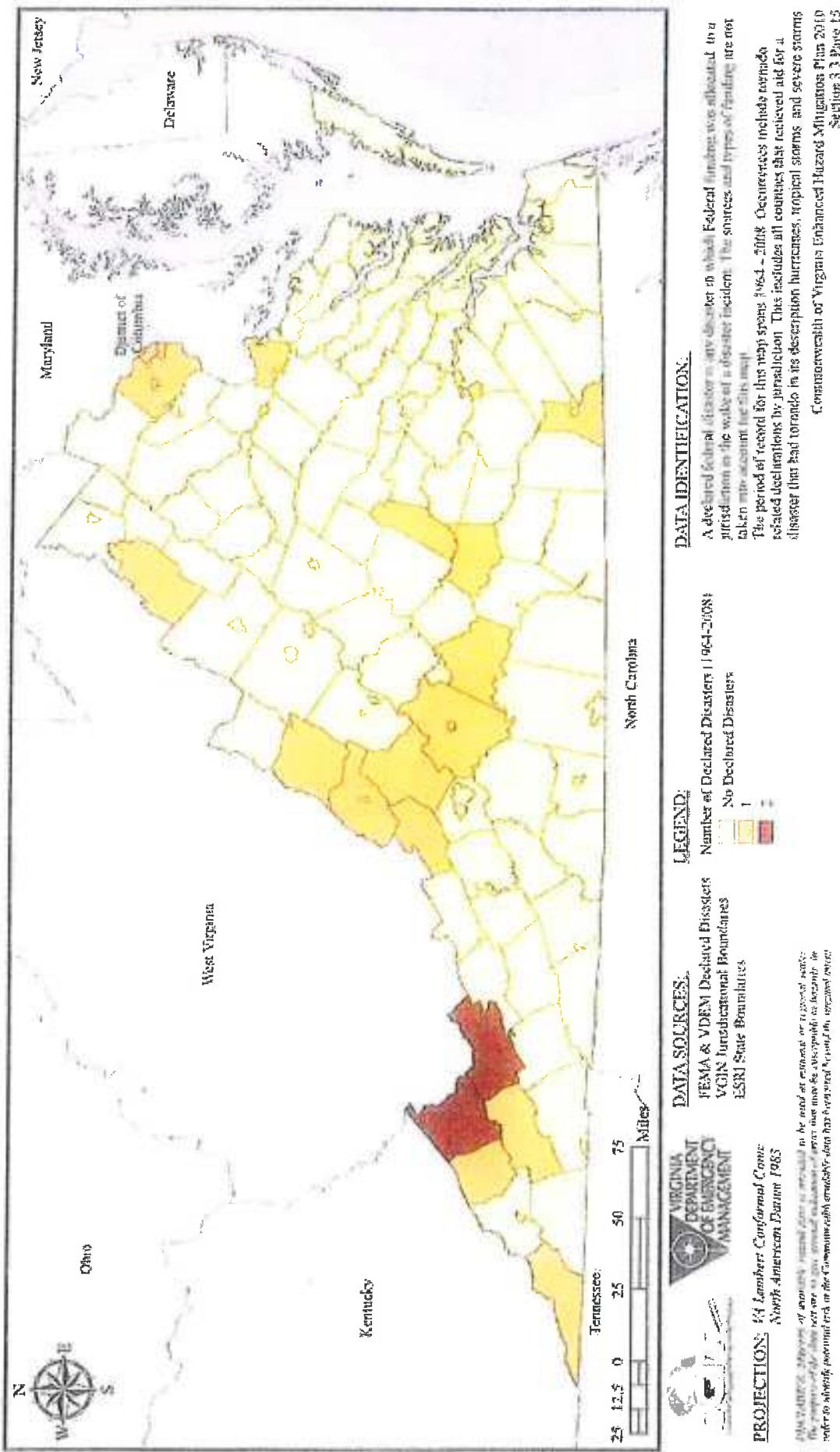


Figure 3.3-4: Non-Rotational Wind Federal Declared Disasters

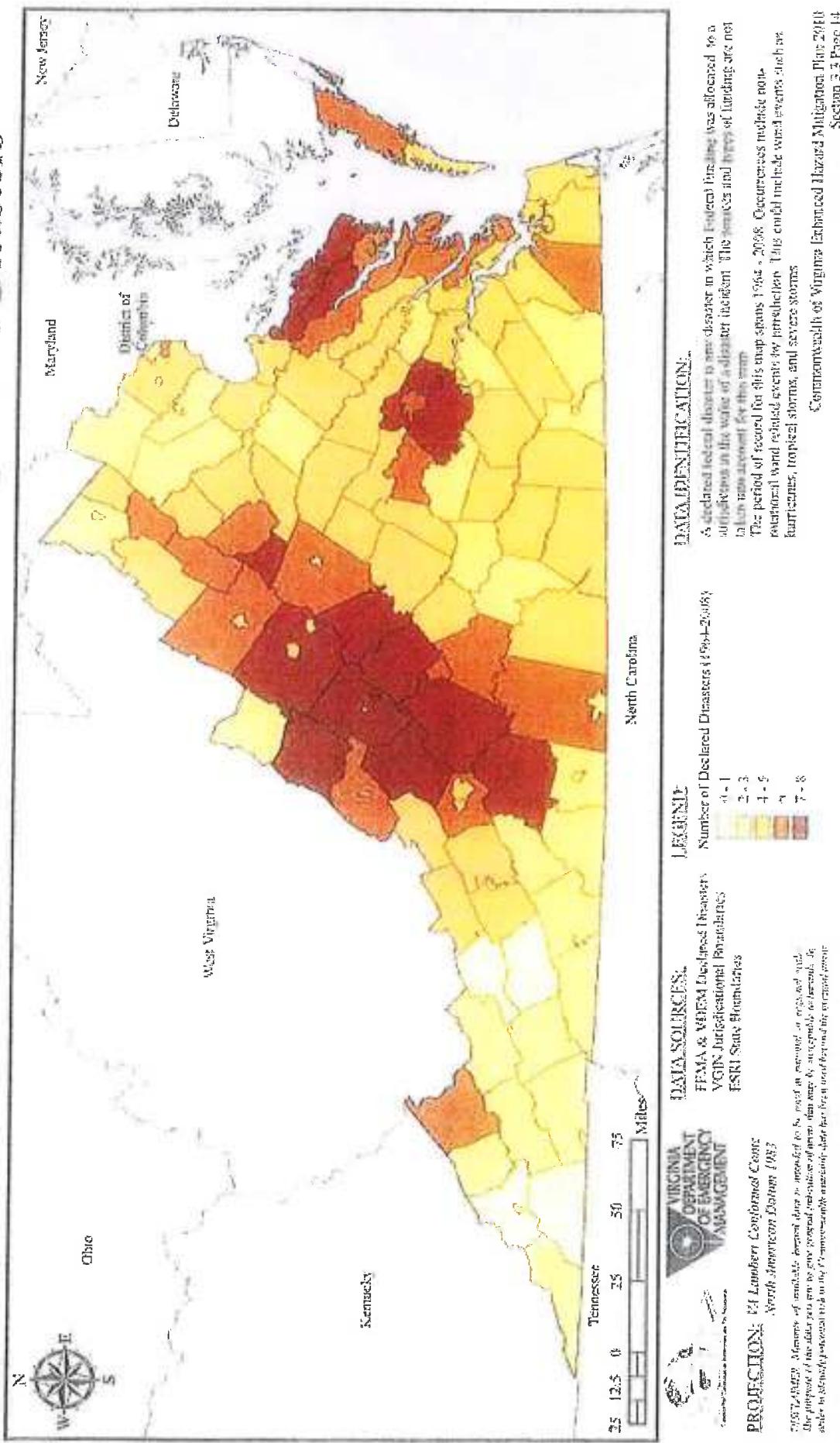


Figure 3.3-3: Flood Federal Declared Disasters

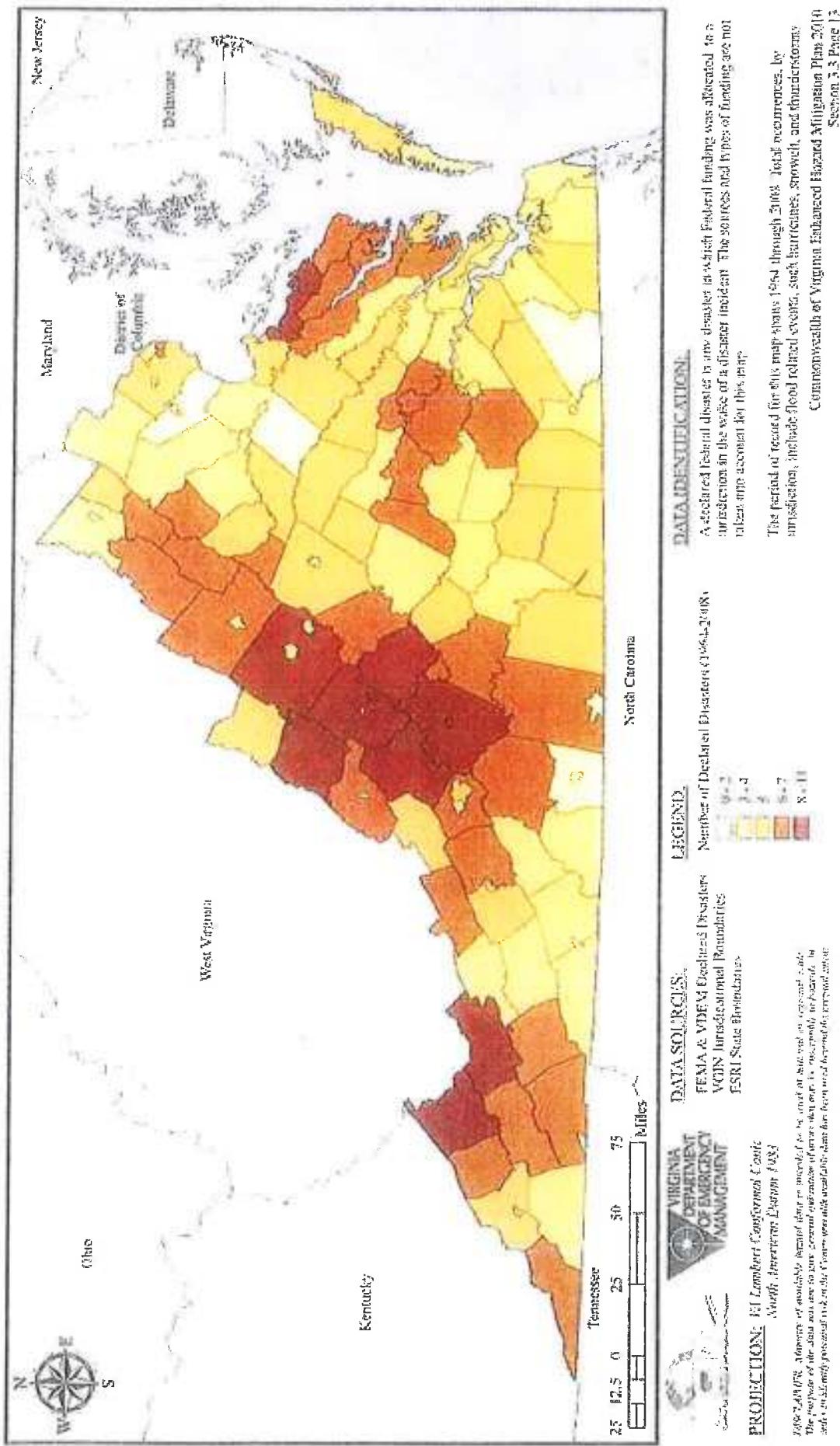


Figure 3.3-2: Drought Federal Declared Disasters

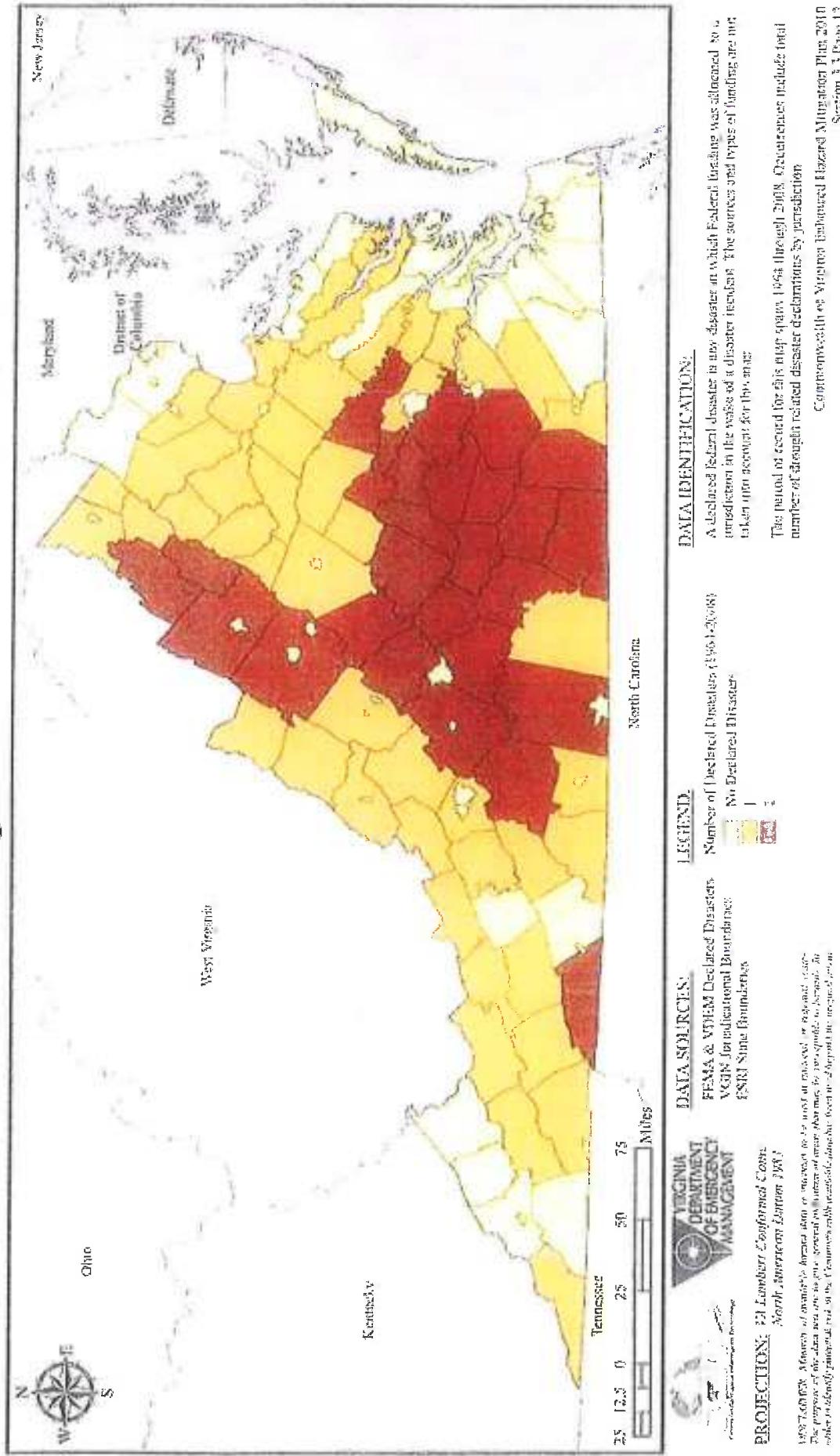
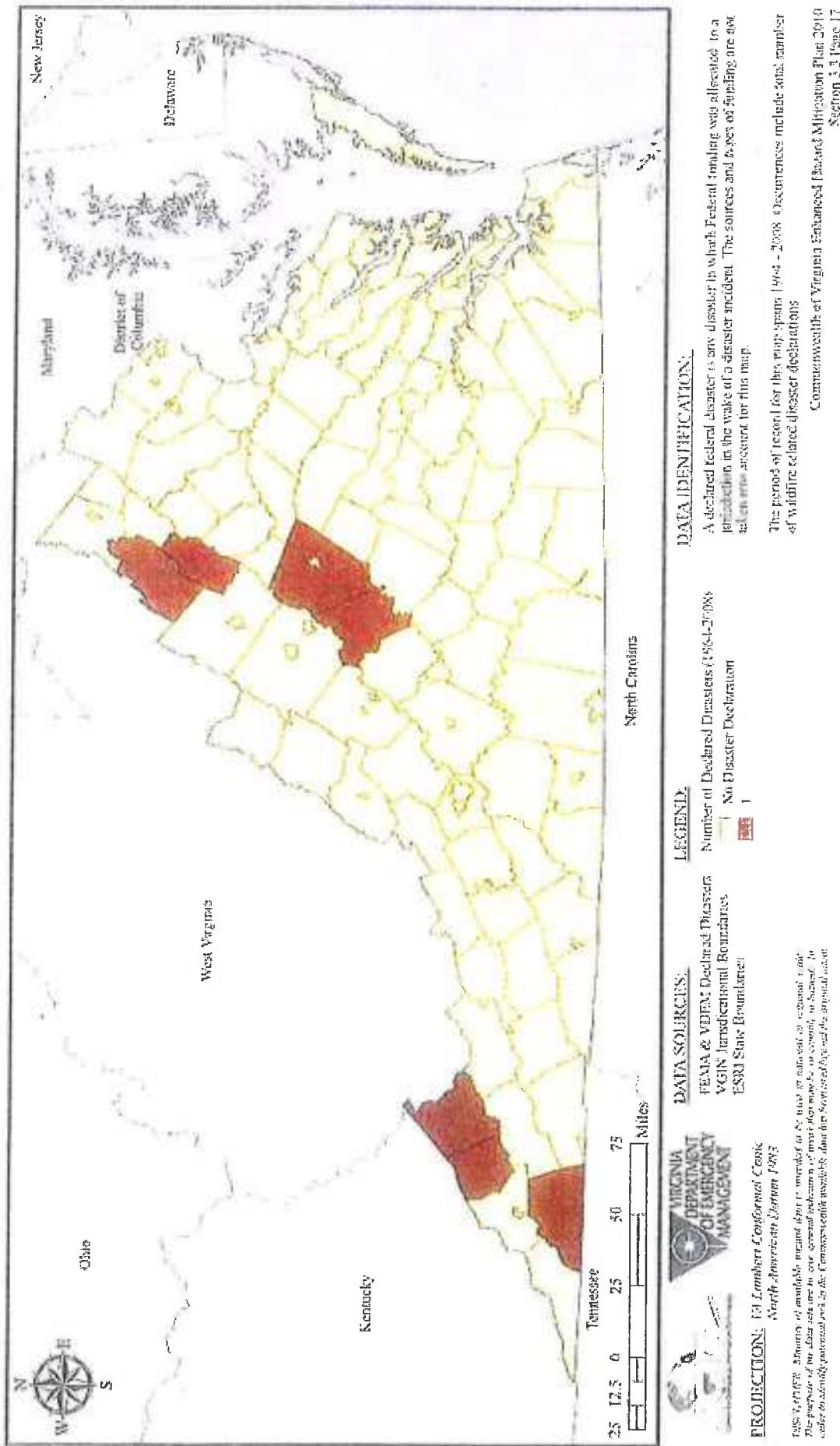
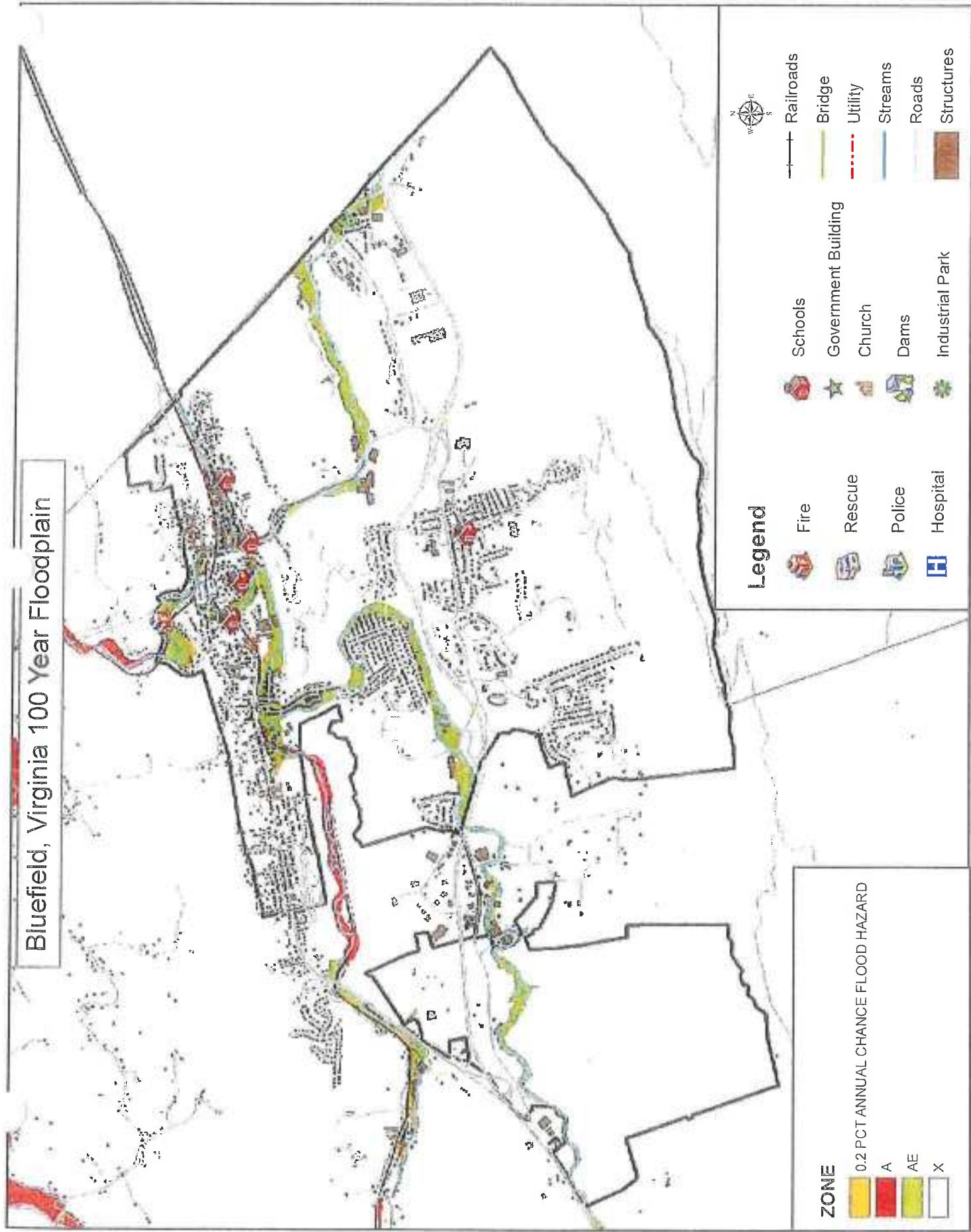


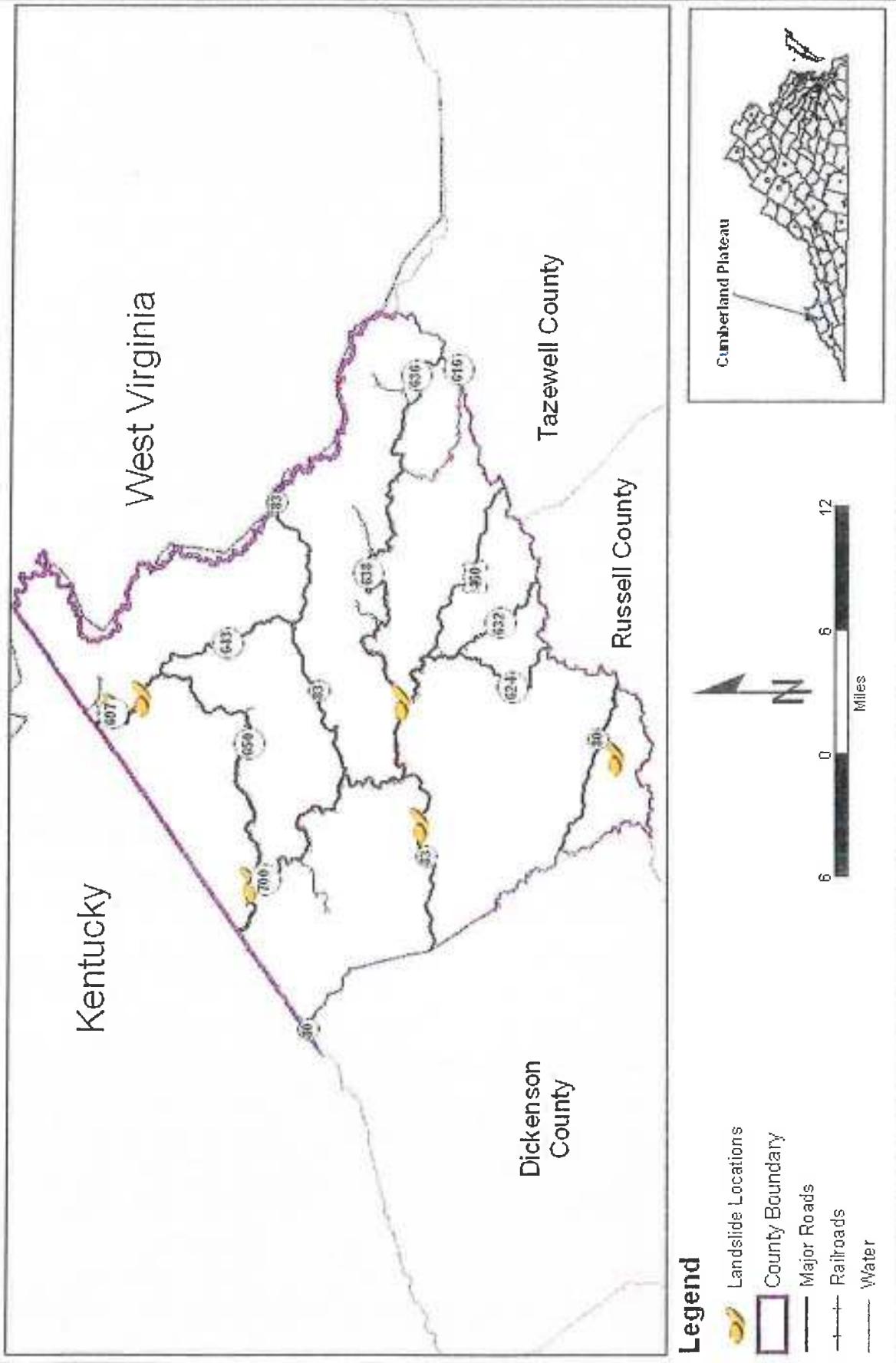
Figure 3.3-7: Wildfire Federal Declared Disasters



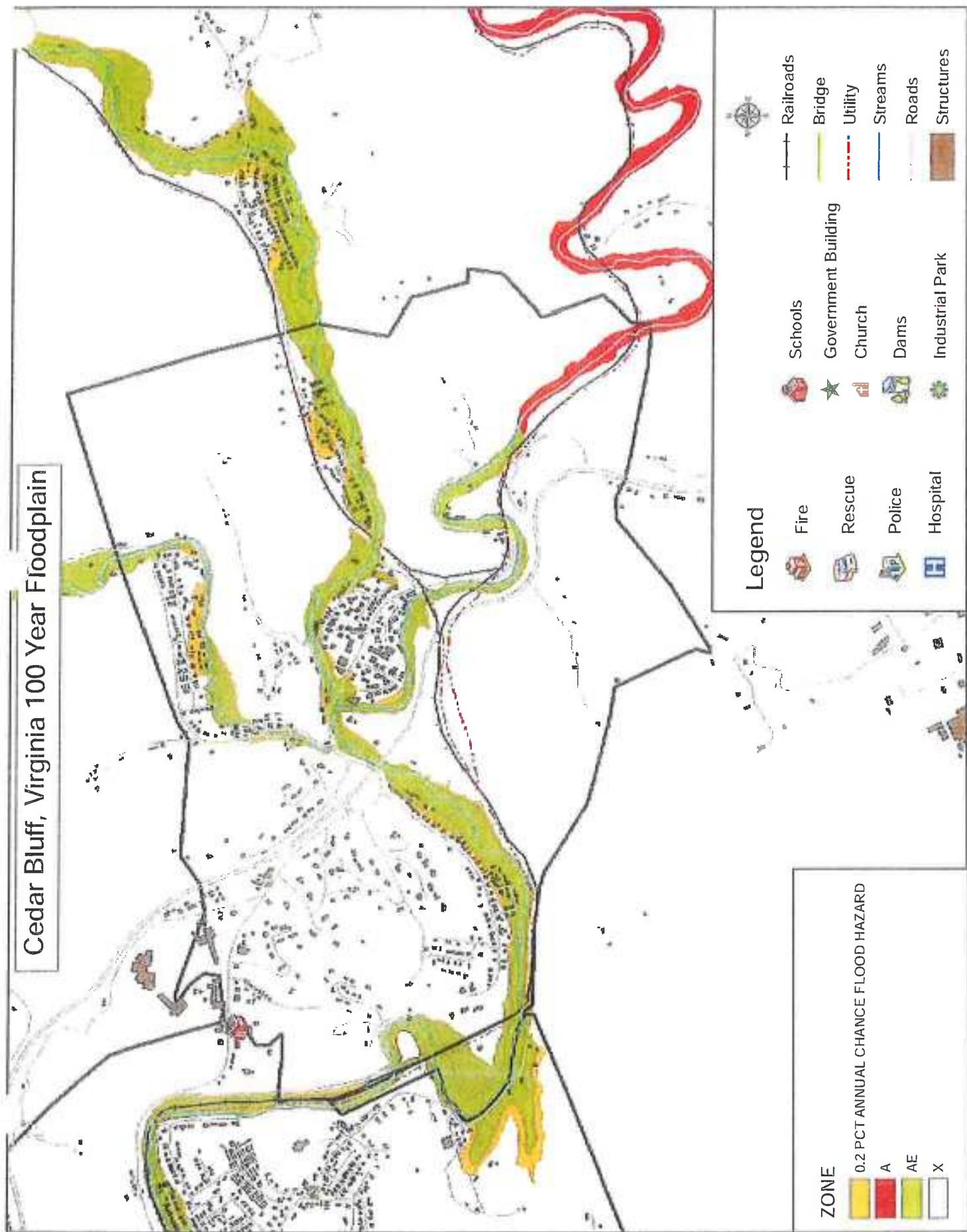
Bluefield, Virginia 100 Year Floodplain



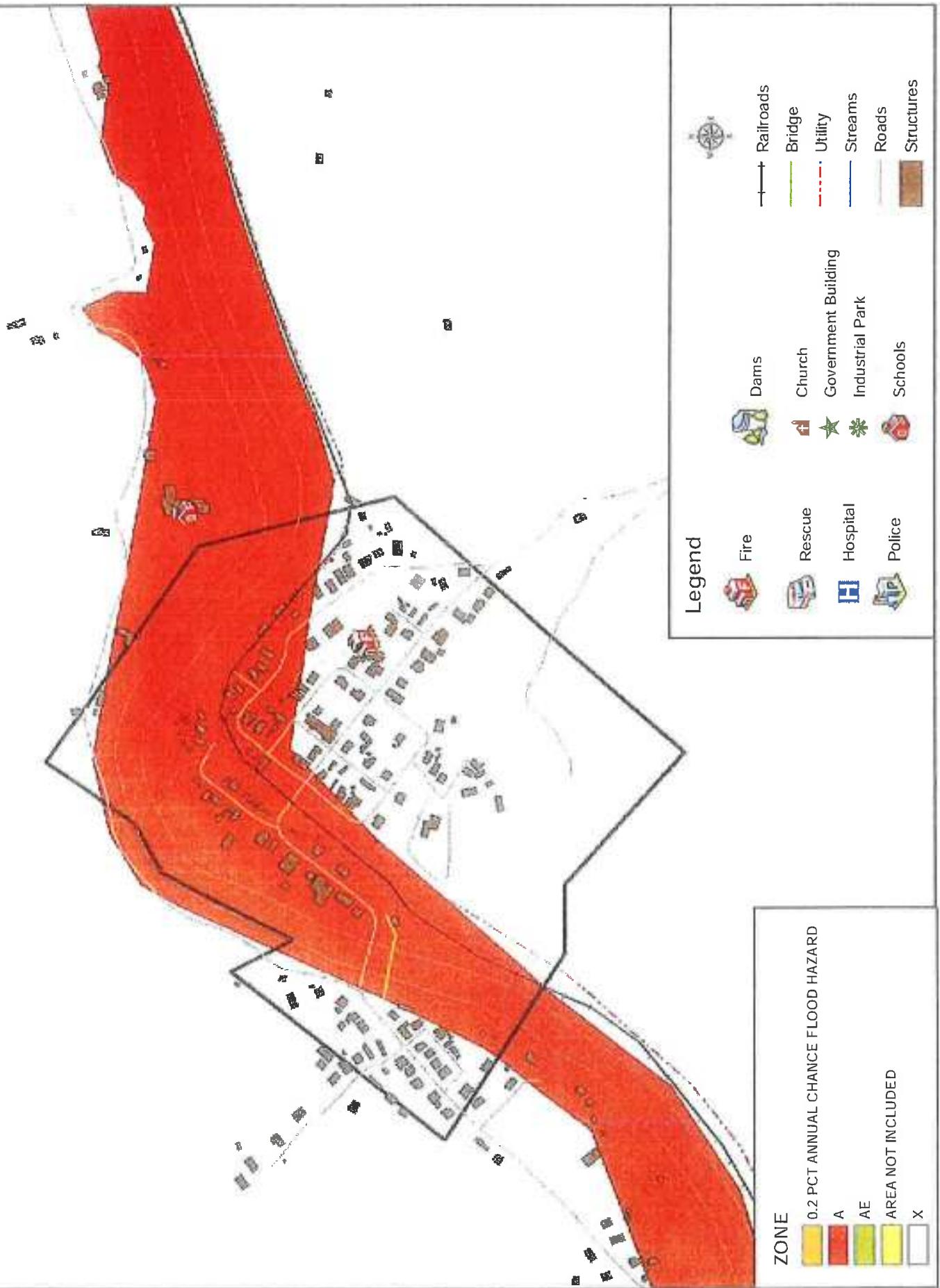
Buchanan County; Virginia Landslide Locations



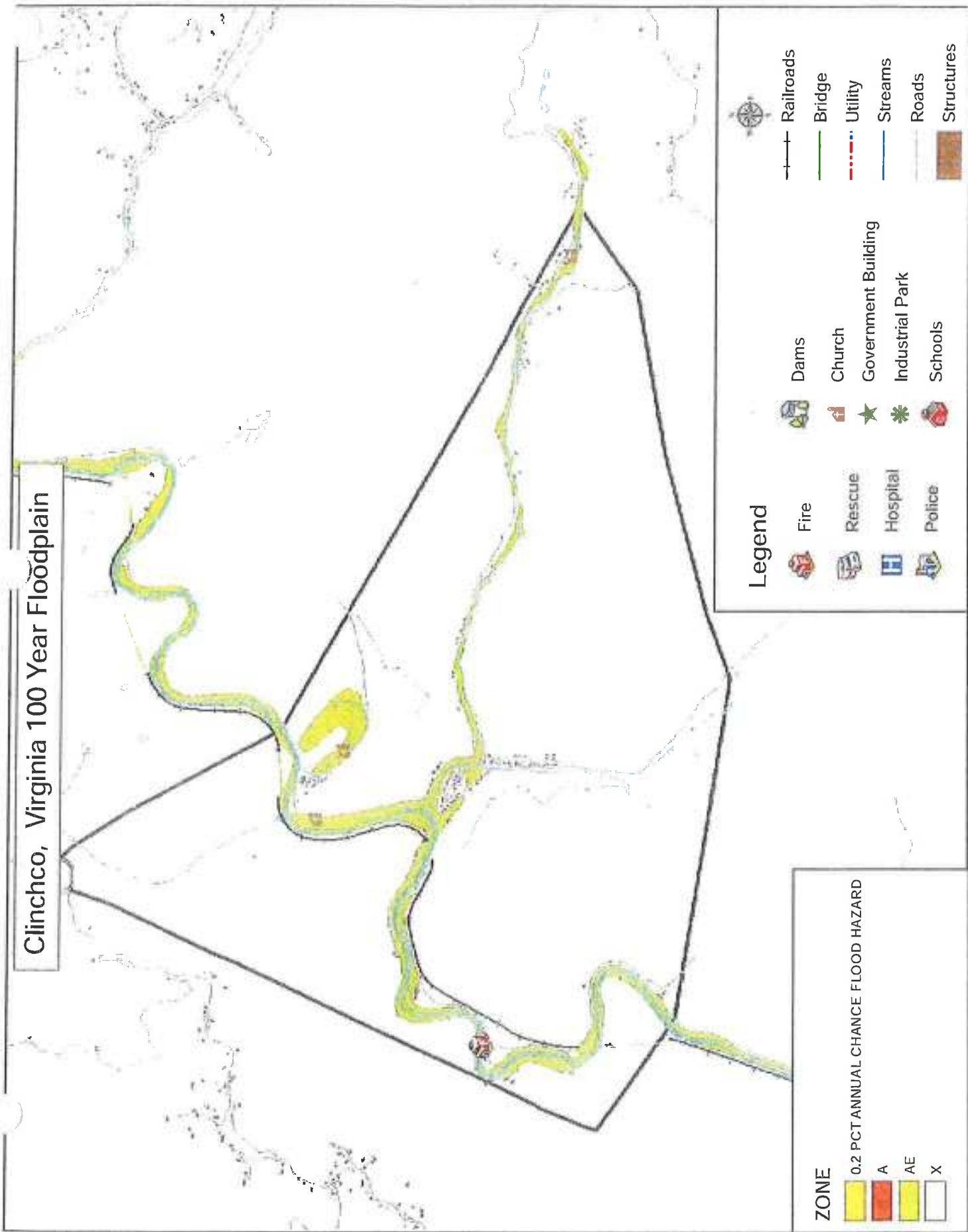
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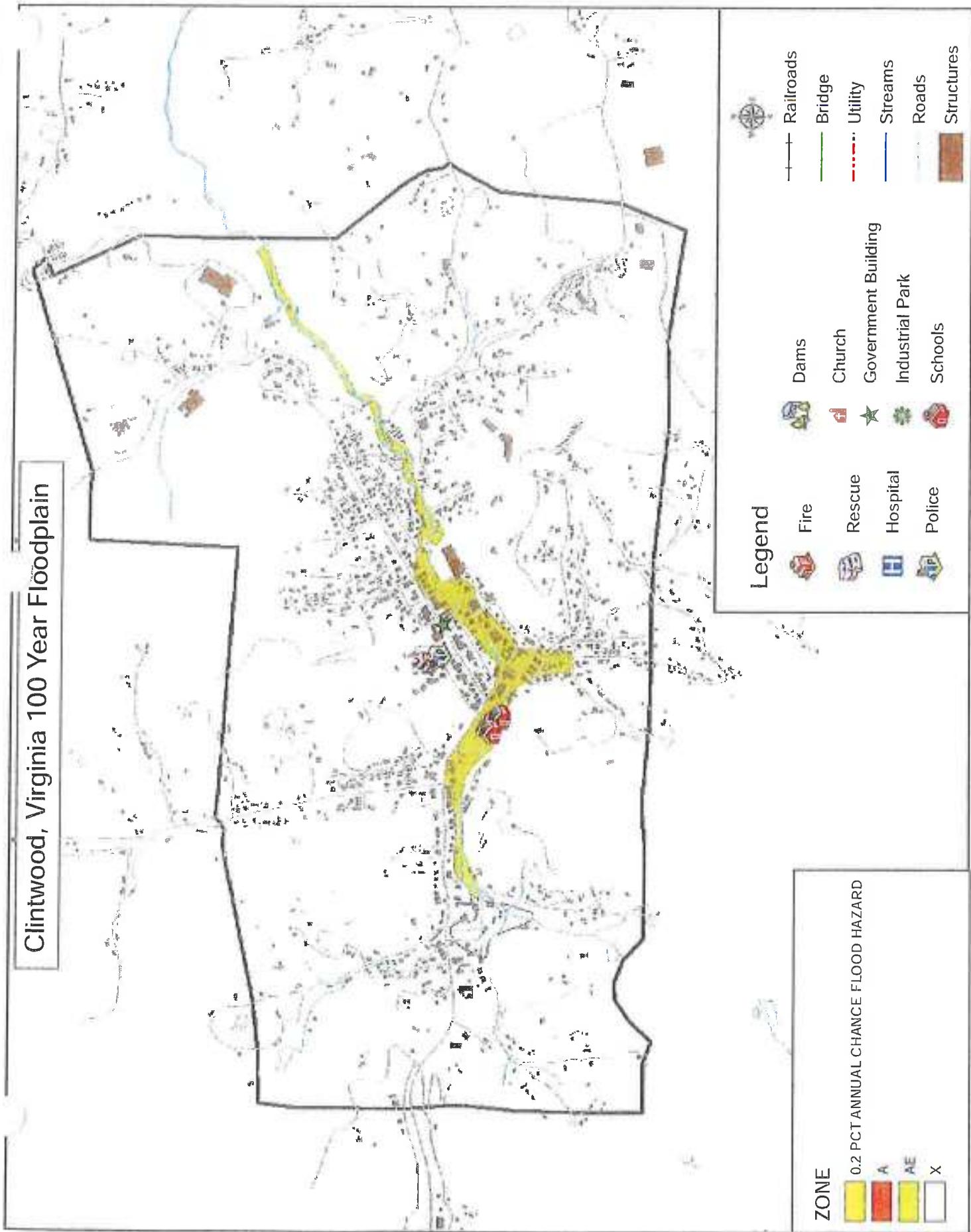
Cleveland, Virginia 100 Year Floodplain

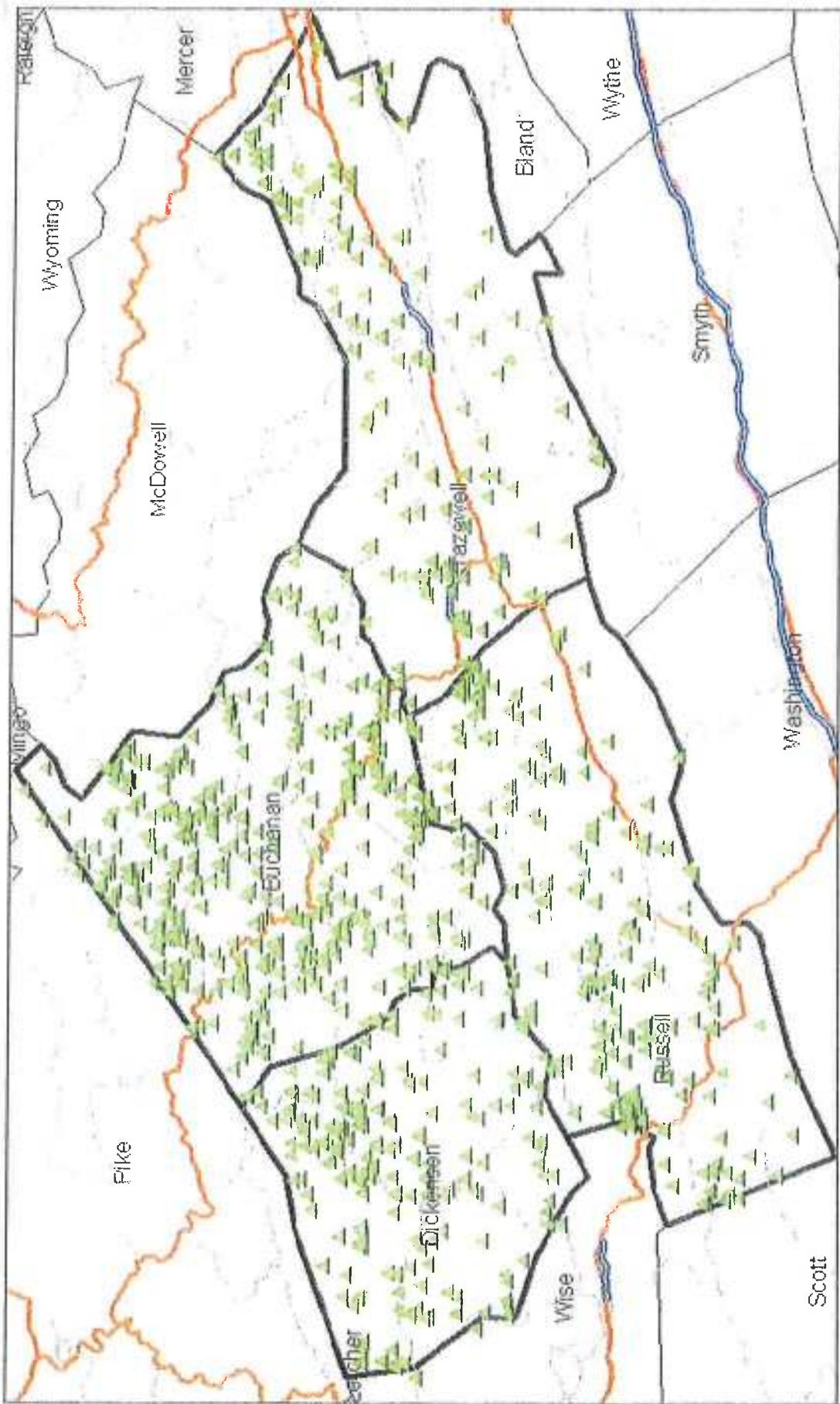


Clinchco, Virginia 100 Year Floodplain



Clintwood, Virginia 100 Year Floodplain



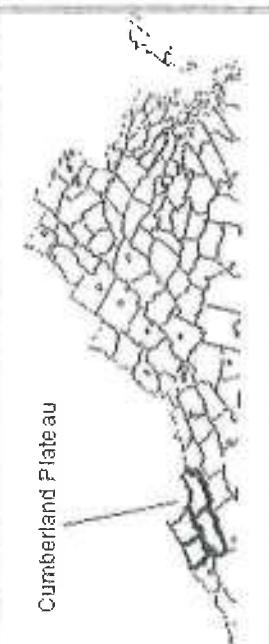


Cumberland Plateau, Wildfire Incidents From 1995 - 2008

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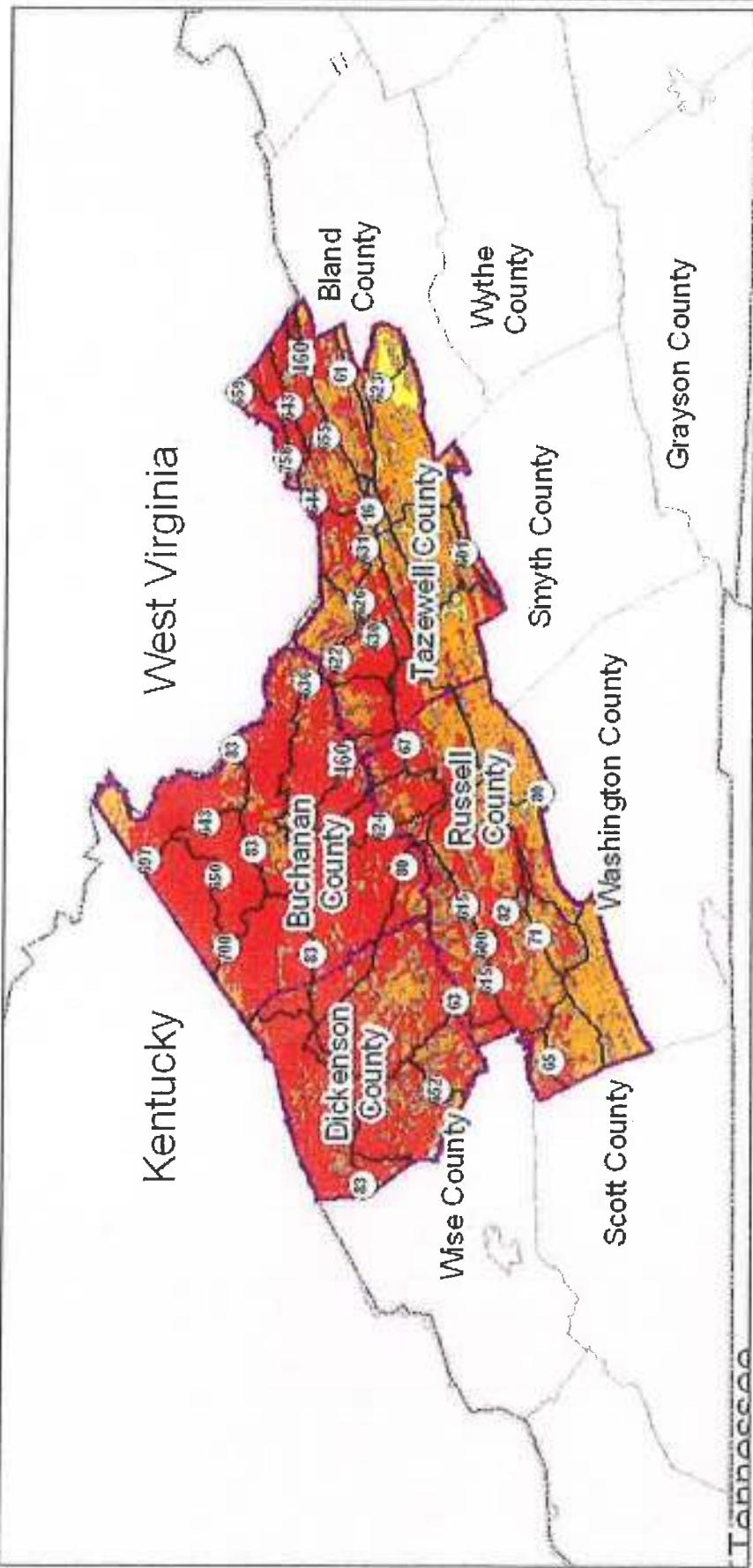
- ▲ Wildfire Incidents
- County Boundary

45 225 0 45 3 3.5 42 Miles



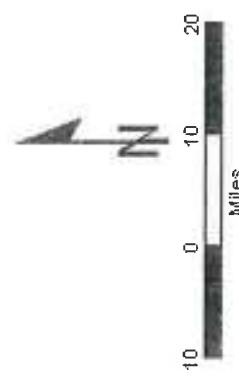
Cumberland Plateau

Cumberland Plateau, Virginia Fire Risk Zones

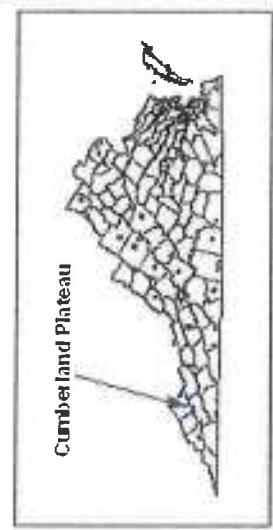


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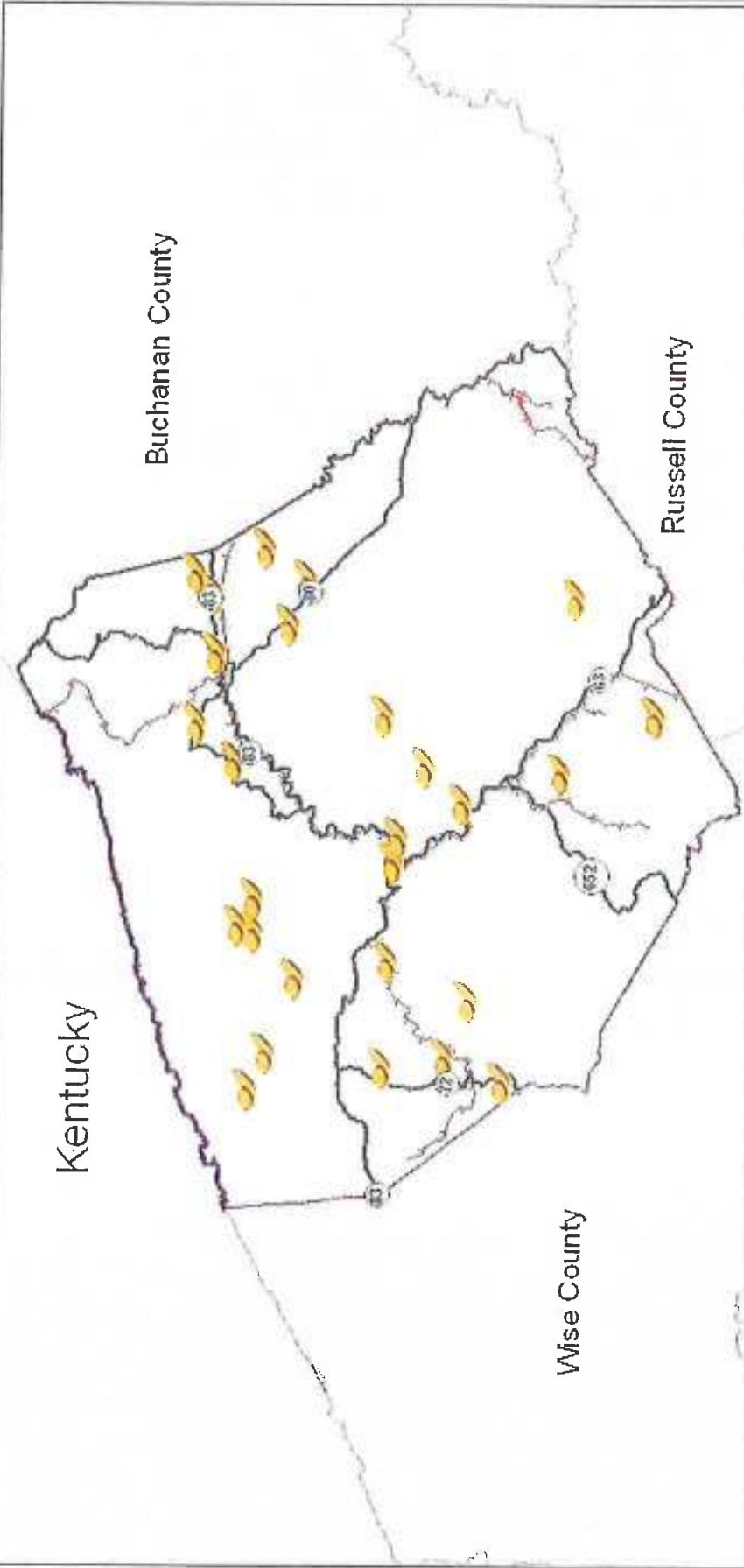
- Fire Risk Zones — Major Roads
- Low
 - Medium
 - High



Wildfire Risk Data from The Virginia Department of Forestry, July 2003. Wra-03-statewide

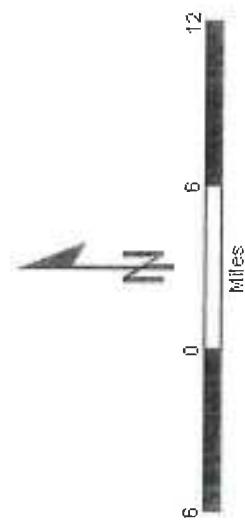
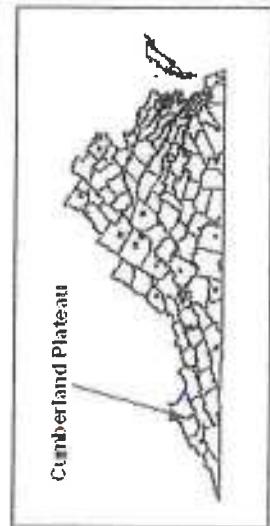


Dickenson County, Virginia Landslide Locations

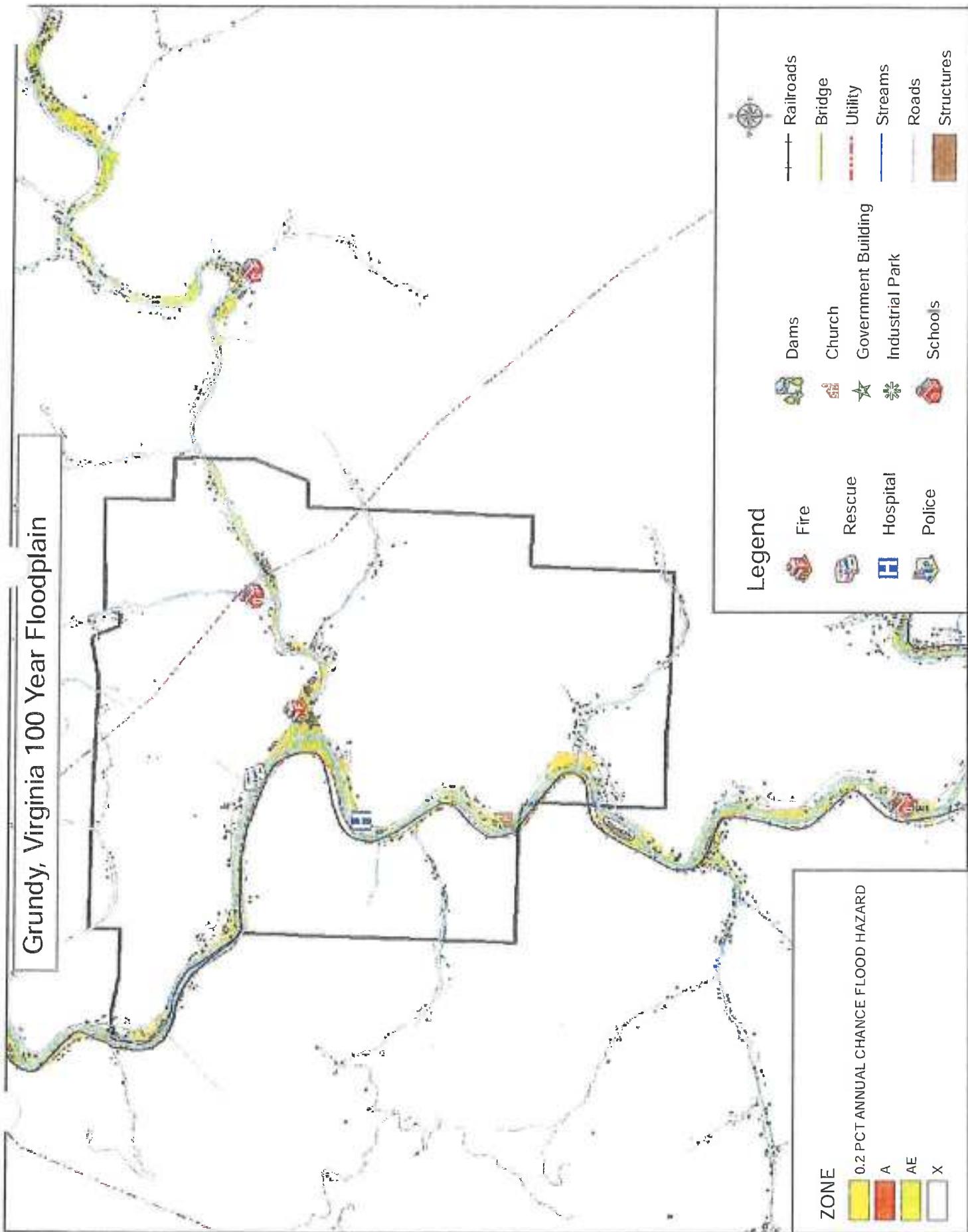


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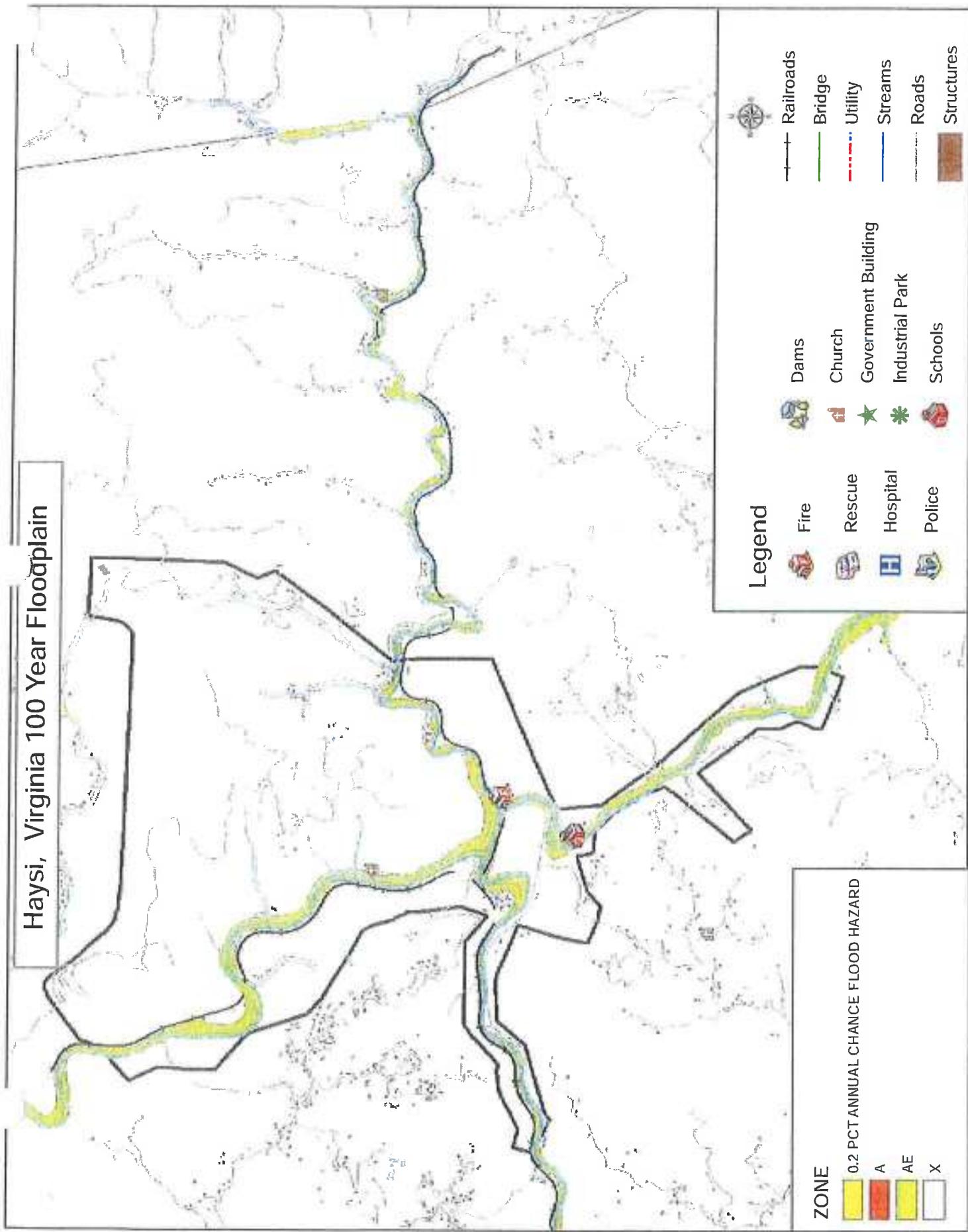
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- County Boundary
- Major Roads
- Railroads
- Water



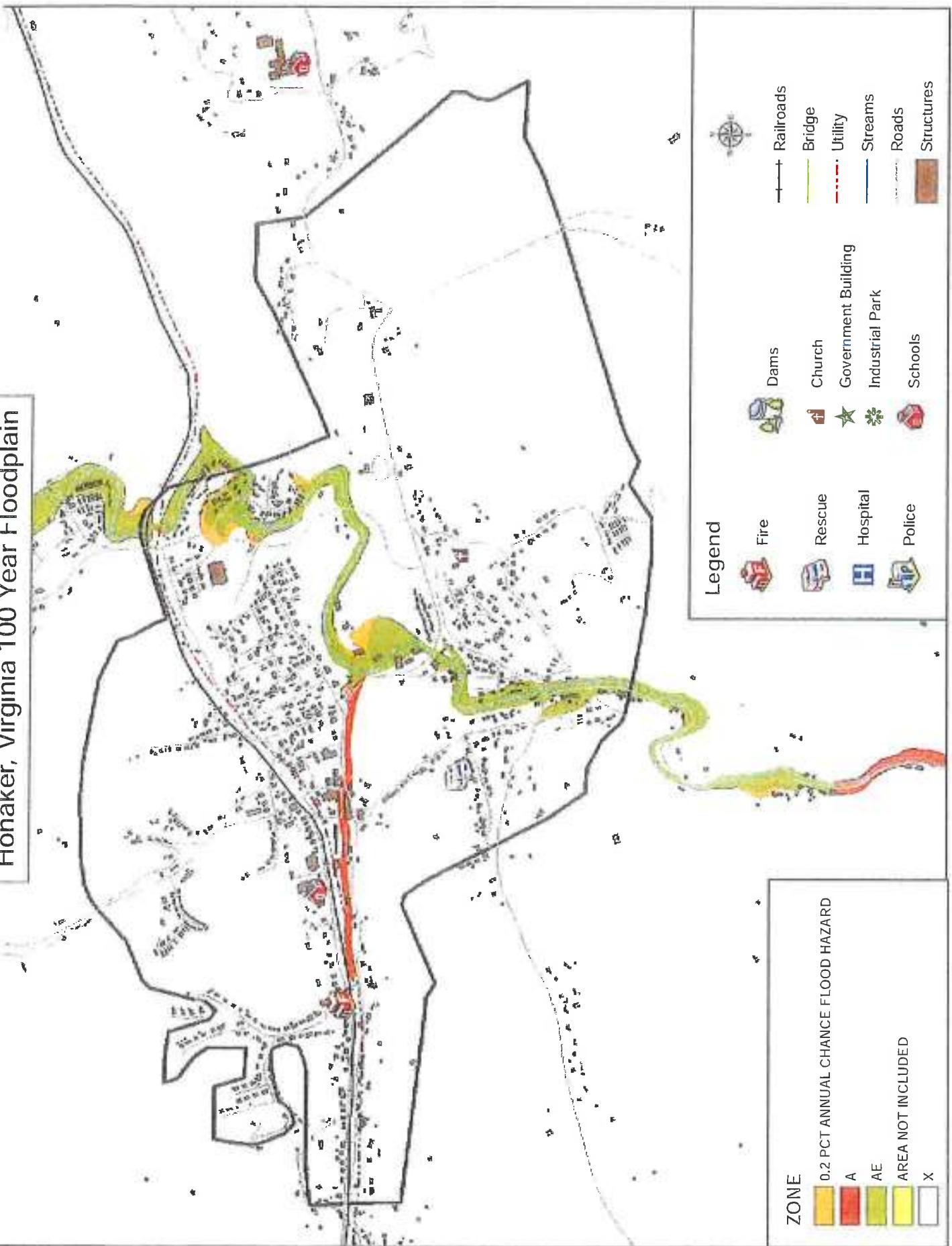
Grundy, Virginia 100 Year Floodplain



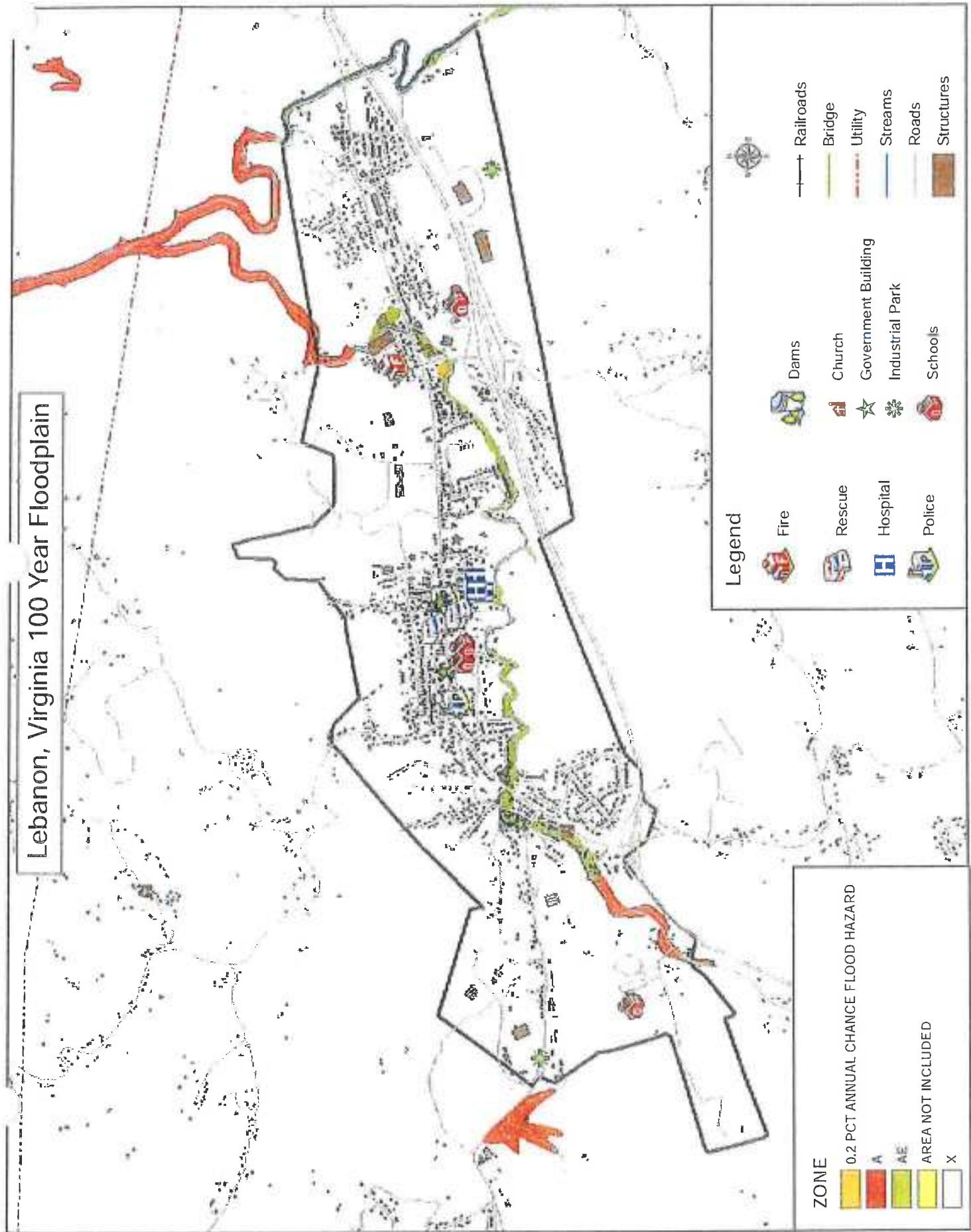
Haysi, Virginia 100 Year Floodplain



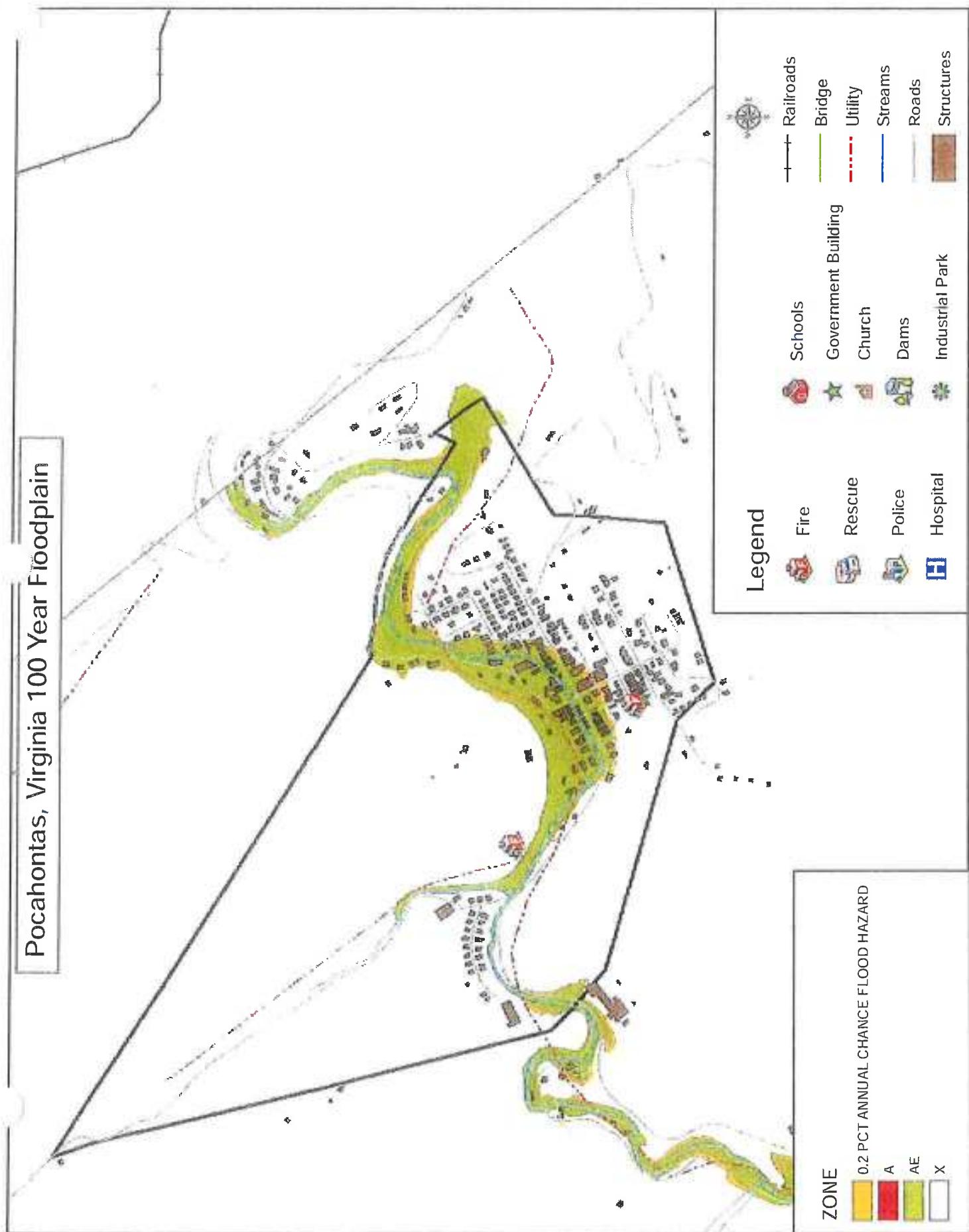
Honaker, Virginia 100 Year Floodplain



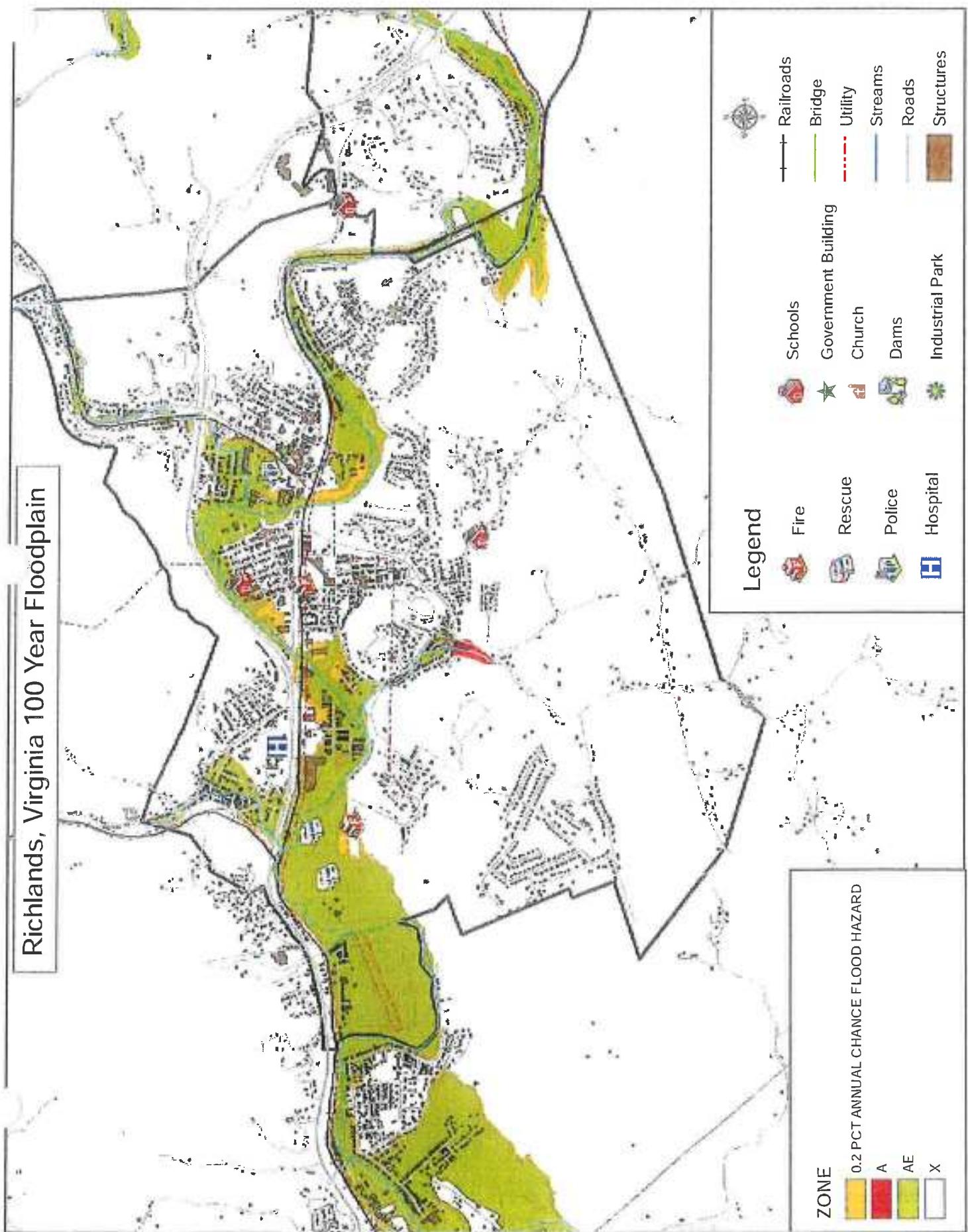
Lebanon, Virginia 100 Year Floodplain



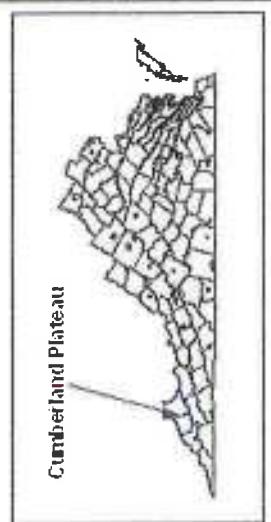
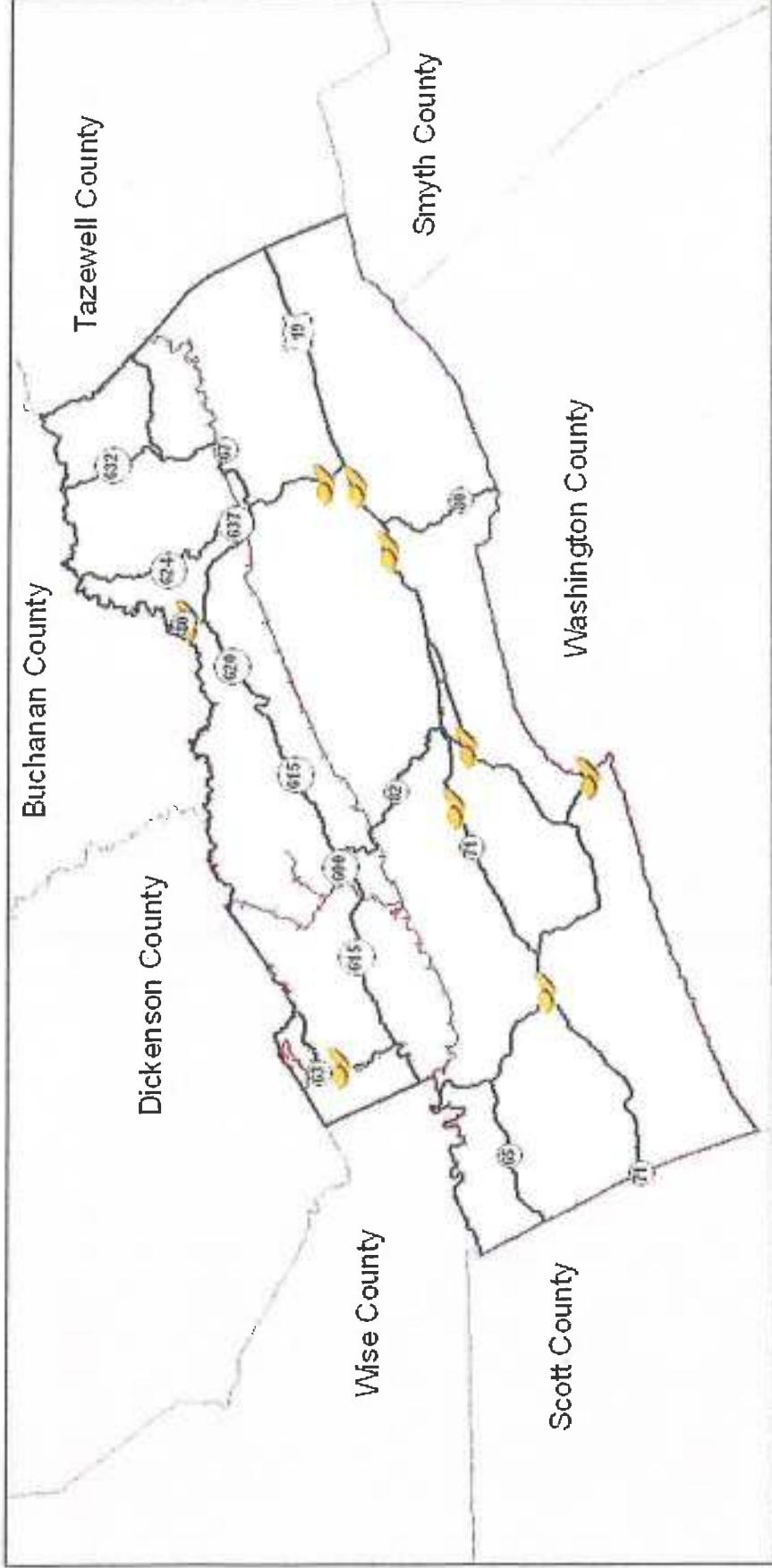
Pocahontas, Virginia 100 Year Floodplain



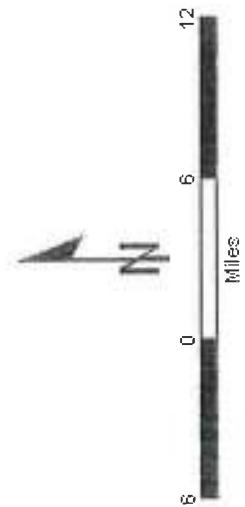
Richlands, Virginia 100 Year Floodplain



Russell County, Virginia Landslide Locations



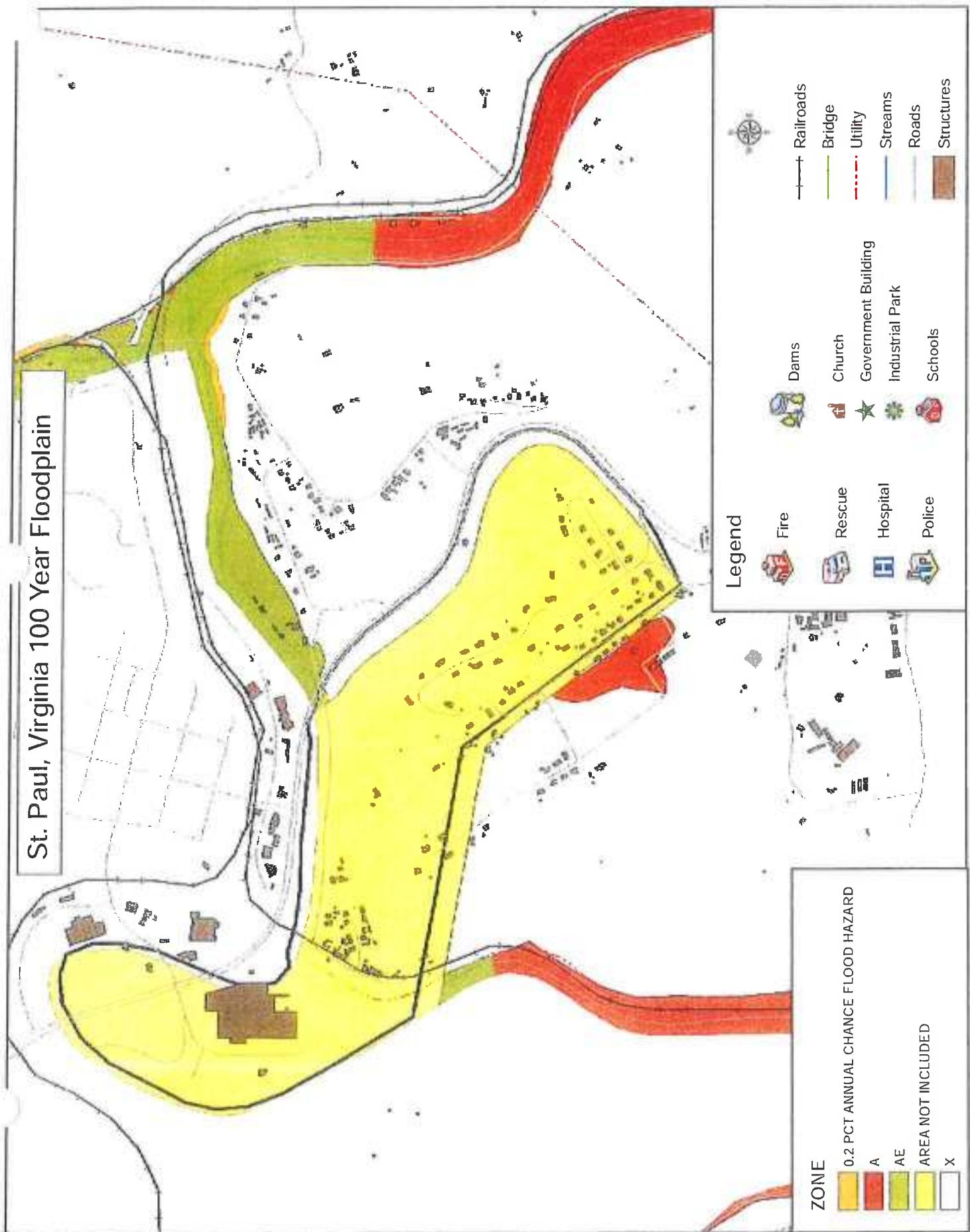
116 *Journal of Health Politics*



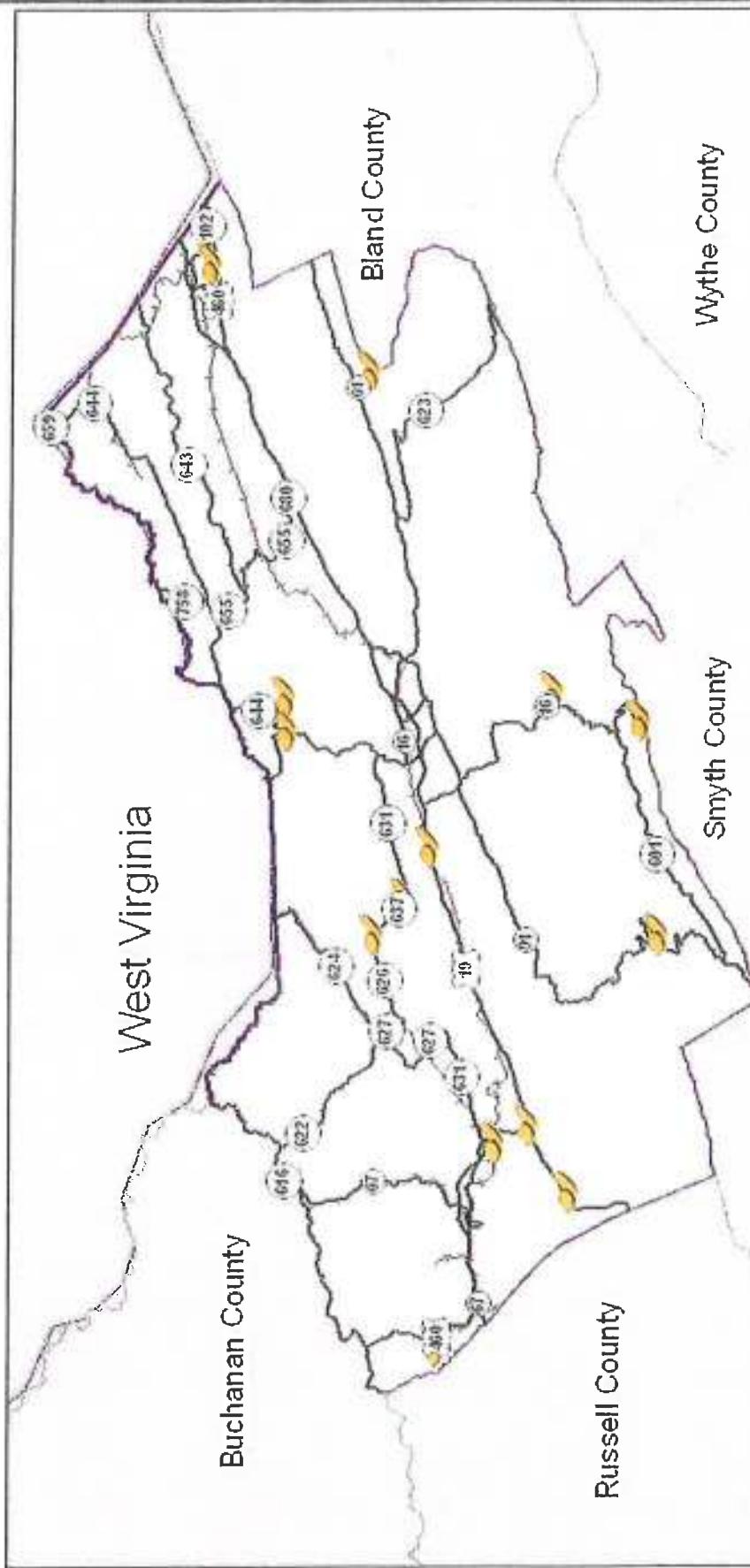
Legend

- A legend located in the top right corner of the map. It includes five entries: 'Landslide Locations' with a blue circle icon, 'County Boundary' with a dark grey rectangle icon, 'Major Roads' with a solid black line icon, 'Railroads' with a dashed black line icon, and 'Water' with a light blue wavy line icon.

St. Paul, Virginia 100 Year Floodplain

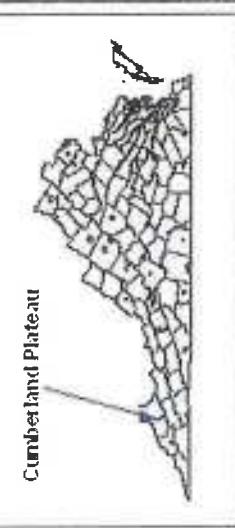
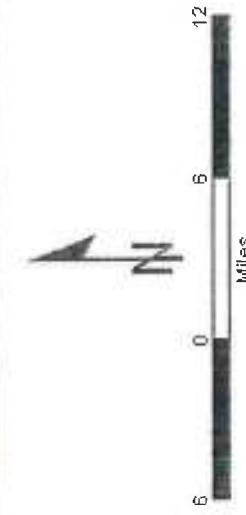


Tazewell County, Virginia Landslide Locations

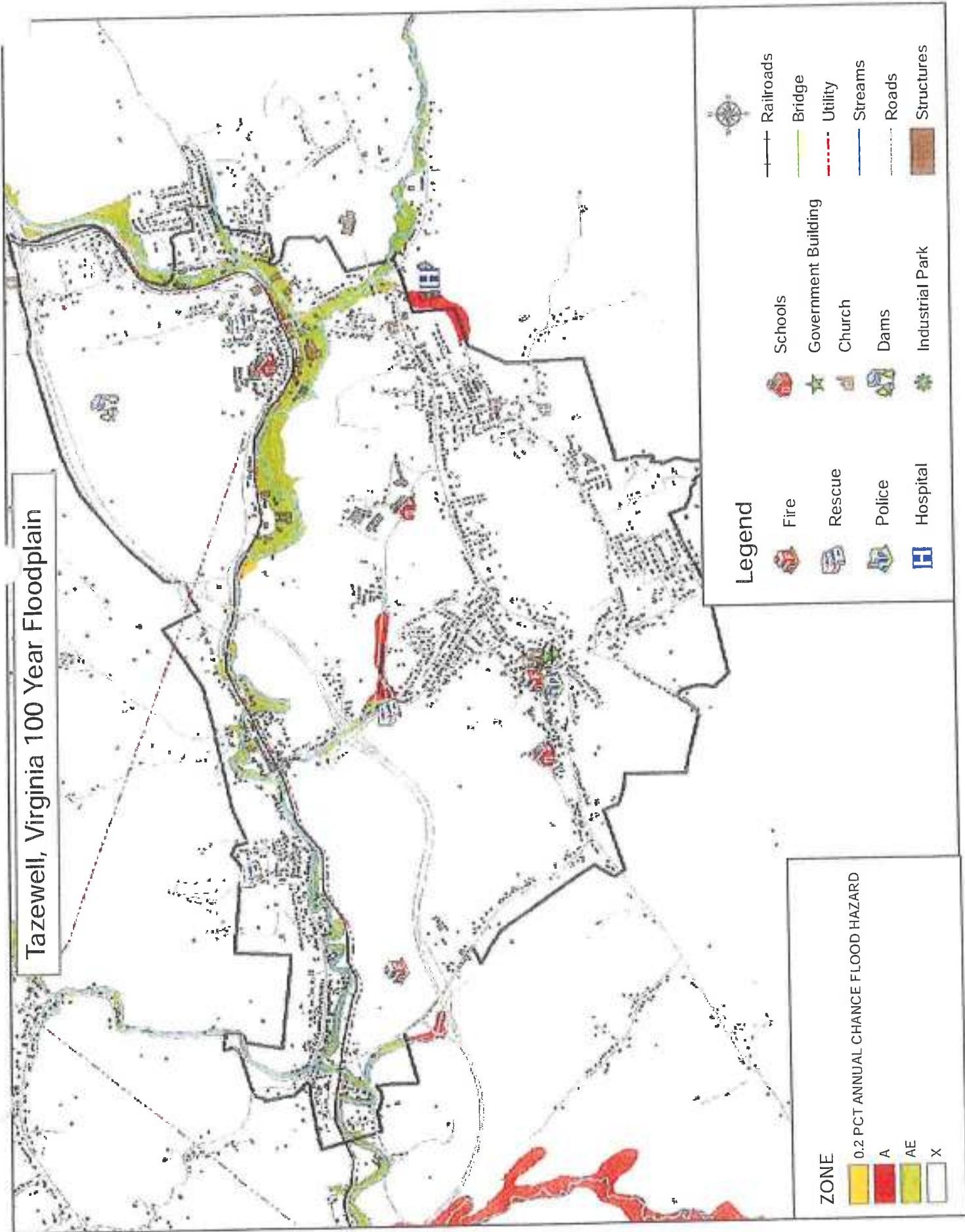


Legend

- Landslide Locations
- County Boundary
- Major Roads
- Railroads
- Water



Tazewell, Virginia 100 Year Floodplain



NEWS RELEASE

Cumberland Plateau Draft Hazard Mitigation Update Plan Available on Website

The Cumberland Plateau Planning District Commission, in cooperation with local counties and towns, has been working to complete a Regional Mitigation Plan Update for the District. The entire update plan is now available for review and comments on the Planning District's website at www.cppdc.com. Hard copies are available at each County Administrator's office and each Town Hall in the District.

Completion and adoption of the Plan is required by the Virginia Department of Emergency Management (VDEM) and the Federal Emergency Management Agency (FEMA) in order for localities to be eligible for certain pre-disaster mitigation funds.

For more information, contact Shane Farmer at 276-889-1778.

This add was printed in the Richlands News Press, The VA Mountaineer, The Dickenson Star, and the Lebanon News Press.

PUBLIC MEETING

Cumberland Plateau Regional Hazard Mitigation Update Plan

A public meeting on the Cumberland Plateau Regional Hazard Mitigation Update Plan will be held on Thursday, November 15, 2012 at 10:00 a.m. at Southwest Virginia Community College in Richlands, Room C-126 at the Community Center. The public will be able to ask questions or request additions to the Update Plan at this hearing. An electronic copy is now available on the Cumberland Plateau Planning District Commission website at www.cppdc.com.

Copies also are available for public view at the Planning District Commission's office at 224 Clydesway Drive, Lebanon, Virginia, and the PDC counties of Buchanan, Dickenson, Russell, and Tazewell Boards of Supervisors Offices, as well as the Towns located in these counties.

This add was printed in the Richlands News Press, The VA Mountaineer, The Dickenson Star, and the Lebanon News Press.

APPENDIX VIII: TOWN OF CLINTWOOD
COMPREHENSIVE PLAN

CLINTWOOD VIRGINIA

The Planning Document

**Background
Analysis
Goals & Objectives
The Comprehensive Plan**

**COMPREHENSIVE PLANNING DOCUMENT
CLINTWOOD, VIRGINIA**

**BACKGROUND ANALYSIS
GOALS AND OBJECTIVES
THE COMPREHENSIVE PLAN**

**Prepared for
Town Planning Commission
and
Town Council
by
Balzer and Associates
Consulting Planners**

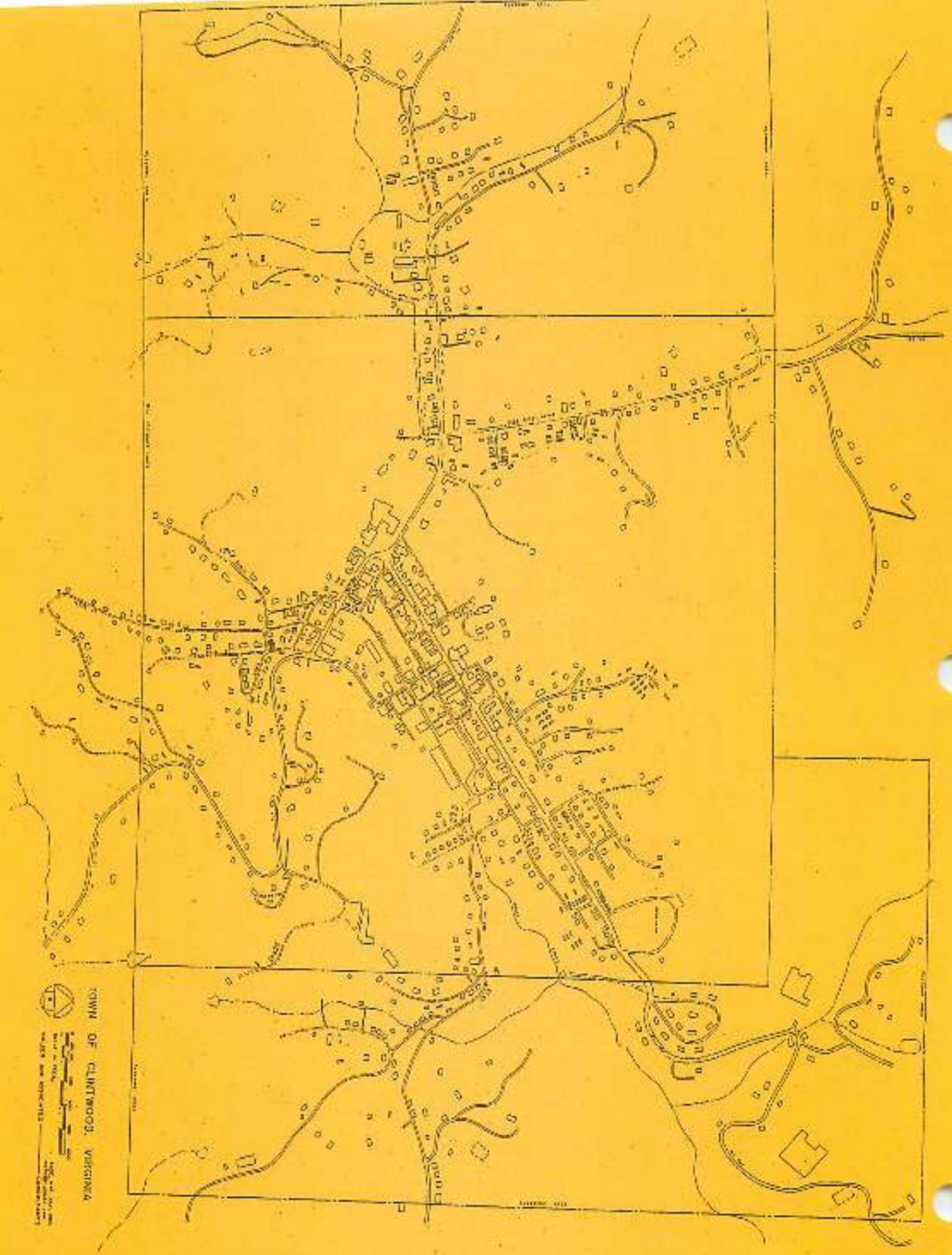
**With
Revisions Prepared by
Weldon Cooper Center for Public Service
University of Virginia
Southwest Virginia Office
and
Cumberland Plateau Planning District Commission
1998-1999**

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INTRODUCTION

INTRODUCTION

On June 3, 1980, the Town of Clintwood, Virginia contracted with Balzer and Associates, Inc. of Salem, Virginia to prepare a comprehensive community development plan. The planning area was defined as the land within the corporate limits of the Town as well as land located in Dickenson County but adjoining and vitally affecting the development of the Town. Much of this peripheral planning area was annexed by the Town of Clintwood in 1986. The Town has worked with the Weldon Cooper Center for Public Service and the Cumberland Plateau Planning District Commission in 1998-1999 to review the Comprehensive Plan and update certain portions according to Title 15.2-2230 of the Code of Virginia, 1950, amended.

It was agreed that the Clintwood, Virginia Planning Document would be composed of five essential components. They are as follows:

Part I - Inventory and Analysis examines the environmental characteristics, existing land use, building conditions, community facilities, thoroughfares, utilities, economic base, population and financial resources of the Town and the peripheral planning areas.

Part 2 - Goals and Objectives provides the direction and framework for public and private decision-making relative to the physical development of the Town. The goals and objectives address the areas of environment, housing, land use, transportation, economic development and public services and facilities.

Part 3 - Comprehensive Community Development Plan supplies policies that may be used by the Town Council to determine the future physical development of the community and a physical design which will allow the policies to be realized. The plan focuses on land use, transportation and community facilities.

Part 4 - Community Development Programming prioritizes Clintwood's community development needs and evaluates the Town's eligibility for and ability to obtain future grants.

Part 5 - Maps depicting existing land use, building conditions, slope and drainage, existing water system, existing sewer system, community facilities, future land use, and future land use of the Clintwood Courthouse-Commercial Center are on display in the Town Hall Building. The future land use map is also contained within this document.

PART I
INVENTORY AND ANALYSIS

CHAPTER I
ENVIRONMENTAL
CHARACTERISTICS

ENVIRONMENTAL CHARACTERISTICS

The consultants completed an urban suitability study which analyzed the natural environmental characteristics of the Town of Clintwood and its eastern and western peripheral planning areas. The study identified those areas that are the most intrinsically suited for future development. The identification process was premised upon the concept of carrying capacity; i.e., that there are limits to the extent of growth certain geographic areas of the study area can absorb without endangering the public health or safety or damaging the natural environment. The following studies examine the ability of the land as defined by physiography, soils, geological formations, climate, and vegetation, to withstand and support the impacts of residential, commercial and industrial development, as well as recreational utilization and mineral extraction. The findings of these studies will be the basis for the future land use, major thoroughfare, and community facilities plans presented later.

PYSIOGRAPHY

The topography within Clintwood is extremely variable ranging from an elevation of about 1,750 feet along Holly Creek to a high point of 3,050 feet directly southwest of the central business district. Many areas of the Town, and primarily sections of the Central Business District, are within the 100 year flood plain of Holly Creek. Steep slopes surround many of the developed areas posing unique development problems and opportunities. There is one primary drainage basin which encompasses the Town and both planning areas.

Slope

A slope analysis of uncommitted or undeveloped land was conducted utilizing the following four gradient classifications:

- * Flood Plain - slope conditions are not favorable for residential
- * Range A - slope conditions range from 0 - 10 percent and present few if any limitations to development.
- * Range B - slope conditions range from 10 - 20 percent and present moderate limitations to development.
- * Range C - slope conditions exceed 20 percent and present major limitations to development

These slope indicators represent the steepness of an area. For example, a 10% slope means that the elevation of the land increases 10 feet for every 100 feet of surface distance. Areas with slopes greater than 20 percent offer special development problems and opportunities. Steep slopes are more susceptible to erosion, encourage runoff and are generally unsuited for most commercial and industrial development. The provision of transportation and utility services also becomes more difficult. However, with proper design and consideration of other development

determinants such as soil and climate, steep-slope areas may be utilized as unique residential environments emphasizing such positive aspects as architectural design, neighborhood design, solar access and natural vistas. Generally, the type and intensity of steep-slope development is directly proportional to the cost of the improvements required to insure the functionalism of the building as well as the public health, safety and welfare.

Functional, economical, and safe steep-slope development is dependent upon the effective administration of the building code and the building permit system. The site plan review procedures included in the permit application process should consider not only the data and standards contained within this document, but also the specific environmental characteristics of the site. It is more important that the building permit be evaluated by a trained building inspector. Larger developments should be reviewed by a site plan review committee which could consist of the building official and members of the planning commission.

Flood Hazard Areas

A dominant feature in Clintwood is the existence of the Holly Creek flood plain. This flood hazard area is indicated on the Slope and Drainage Map on display in the Town Hall. However, for specific information pertaining to property in the Town, the flood hazard boundary maps on file in the Town Clerk's office should be referenced. These maps, prepared by the United States Department of Housing and Urban Development, Federal Insurance Administration in 1977 and 1978 indicate the official boundaries of the "Special Flood Hazard Area" (100 year flood plain) in Clintwood and the peripheral planning areas.

The 100 year flood is a flood that, on the average, is likely to occur once every 100 years. A 100 year flood has a 1 percent chance of occurring each year, although the flood may actually occur in any year. The flood fringe is that area immediately adjacent to the 100 year flood plain that is within the realm of the 500 year flood.

The Town has no regulations pertaining to current or future development in the flood hazard areas. The Consultants recommend that the Town manage all land located in flood plains by way of flood plain regulations. These regulations may be included either within the building permit application process or within the provisions of the zoning ordinance or building code.

Slope Characteristics of Undeveloped Land: Town of Clintwood

Approximately 57 percent, or 367 acres, of Clintwood's total area of 640 acres is undeveloped or uncommitted. The following table indicates quantities of vacant land by slope category.

SLOPE CHARACTERISTICS OF UNDEVELOPED OR UNCOMMITTED LAND 1

TOWN OF CLINTWOOD

SLOPE CATEGORY	TOTAL ACREAGE
FLOOD PLAIN	4.6
0-10%	83.8
10-20%	175.6
OVER 20%	102.9
TOTAL	366.9 ACRES

Source: Balzer and Associates

1 It is extremely important to understand that undeveloped or uncommitted land is not synonymous with land suitable for development. Development suitability will be determined not only by the natural environmental characteristics discussed in this section but also by ownership and value.

2 Slope characteristics were determined from United States Geological Survey Topographical Maps. In some locations, actual slope characteristics may vary slightly from those mapped because of strip mining activities or erosion.

Approximately 29 percent of all undeveloped or uncommitted land in Clintwood is either situated in flood hazard areas or in areas with slopes greater than 20 percent. In contrast, two hundred and fifty nine acres or 71 percent of all undeveloped or uncommitted land is topographically adequate for development. Although some of this acreage occurs as small and isolated parcels much of this land is adjacent to roads, water and sewer facilities. In general, the future cost of developing these sites for residential and commercial purposes would be reasonable. Industrial development is also possible, although large expanses of level or nearly level land (0-5 percent) required for manufacturing is not as prevalent as land with slopes in the range of 5 to 20 percent.

Slope Characteristics of Undeveloped Land: Peripheral Planning Areas

Approximately 86 percent, or 565 of the 660 acres which constitute Clintwood's peripheral planning area are undeveloped or uncommitted. The following tables list quantities of vacant land by slope category for both the western and eastern peripheral planning areas.

SLOPE CHARACTERISTICS OF UNDEVELOPED OR UNCOMMENDED LAND

WESTERN PERIPHERAL PLANNING AREA

SLOPE CATEGORY	TOTAL ACREAGE
FLOOD PLAIN	8.6
0-10%	77.9
10-20%	142.8
OVER 20%	38.3
TOTAL	267.6 acres

Source: Balzer and Associates

SLOPE CHARACTERISTICS OF UNDEVELOPED OR UNCOMMITTED LAND

EASTERN PERIPHERAL PLANNING AREA

SLOPE CATEGORY	TOTAL ACREAGE
FLOOD PLAIN	11.8
0-10%	108.2
10-20%	143.7
OVER 20%	34.0
TOTAL	297.7 acres

Source: Balzer and Associates

Only 16 percent of all undeveloped or uncommitted land in the peripheral planning areas is either situated in flood hazard areas or in areas with slopes greater than 20 percent. Four hundred and seventy three acres or 84 percent of all undeveloped or uncommitted land is topographically adequate for development. It is especially significant to note that in the eastern peripheral planning area, 108 acres or 36 percent of the total amount of undeveloped or uncommitted land in this area is characterized by slopes which range between 0 and 10 percent. Most of this land occurs in large expanses and is located adjacent to existing roadways.

The future land use element will identify those undeveloped or uncommitted sections that could be developed economically and in accordance with sound land use planning standards.

Drainage Areas:

Drainage areas are significant for two primary reasons: infrastructure planning, primarily sanitary sewers, and storm drainage management.

The drainage or ridge lines for the Town of Clintwood are identified on the Slope and Drainage Map on display in the Town Hall. The Town and most of the area within the peripheral planning areas drain into the Holly Creek drainage basin. Only a very small area in the eastern peripheral planning area drains into the Cranesnest River Basin. Both Holly Creek and the Cranesnest River are part of the Big Sandy River system. Most of the tributaries of Holly Creek contain running water throughout the year, although none of the streams has very large flows. Sandy soils and steep stream gradients act to reduce flooding but make swollen streams very dangerous.

Infrastructure Planning:

Drainage basin and sub-basin delineation is the first and perhaps the most important step in determining the appropriate size of the sanitary sewer service area. Excess capacity of the sewage system may result in excessive cost responsibilities for the users and may allow for unplanned growth which may burden the community in terms of added service requirements.

Sanitary sewer systems are often the least expensive and the most practical when they can be designed as self-cleaning gravity flow systems. Therefore, the most economical means of providing sanitary sewer service is to remain with the natural drainage basins of the community.

While gravity flow is very important, sewer service is not required to serve an entire drainage basin. The identification of Clintwood's drainage basins and sanitary sewer service areas is very important for encouraging or discouraging future growth within the Town and the peripheral planning areas.

Storm Drainage Management:

As rain falls to the earth's surface, it continues to move. Some of it may be quickly evaporated, some of it may be absorbed into the ground to be used by vegetation and for other purposes. The remainder, called runoff, moves by gravity through a system of natural channels into collecting creeks, rivers, and larger water bodies at low elevations eventually terminating in the oceans. The pattern of the drainage network is determined by the topography (influencing the rate of flow) and the geologic make-up of the area through which each drainage path flows (some geologic materials are more resistant than others to erosion caused by the movement of water).

When development of a community takes place, the natural drainage system is affected. As improvements are placed upon the ground, the amount of precipitation which can be absorbed is reduced and that quantity of water is added to the volume of water which must be accommodated

by the drainage system. Within urbanized areas, it is often necessary to construct storm drainage facilities that substitute for natural surface drainage. The storm drainage system consists of a drainage surface, open gutters and ditches, and possibly a series of underground pipes connected by manholes and fed by inlets. The system does not need to be continuous but may terminate into streams, lakes, or gullies wherever flooding or pollution will not be increased.

Because underground storm sewers are very expensive, the drainage basins and sub-basins indicated on the map should be studied carefully by a qualified engineer before any major capital expenditures for storm drainage facilities are made by the Town.

SOILS AND GEOLOGY:

The Town of Clintwood and its peripheral planning areas are characterized by terrain that ranges from hilly to mountainous. Flat lands, even a few acres in extent, are rare. Very steep, although not precipitous valley slopes are common. The entire area is thoroughly dissected by streams. Principle water sources are generally only a few miles apart and are usually separated by ridges 500 to 1,000 feet high. Valleys are V-shaped (deep and narrow) and have little or no flat bottom lands. Alluvium (water deposited clay, silt, sand, gravel or other rock) along streams may be up to 20 feet deep and consists of fine materials or very large boulders in varying proportions. Ridges are steep sided, winding and very irregular in outline, with many side spurs. Most of the few small, flat areas in the region are on divides, but by far the greater part of the ridge tops are very narrow. These steep, narrow ridges are usually capped by sandstone or conglomerate. Flat ridges are generally capped by sandy shale, shale or highly weathered sandstone.

Thick coal is found southwest of Clintwood. The Clintwood coal seam, by far the most predominant seam in the area, is found on the hillsides surrounding the Town and the peripheral planning areas. No coal formations are found within the corporate limits of the Town. A representative geological cross-section of the area surrounding the Town contains the following formations: Clintwood Coal, Eagle Coal, Blair Coal, Lyon Coal, Glamorgan-Dorchester Coal, Gladeville Sandstone, Hagy Coal, Splash Dam Coal, Upper Banner Coal, and Lower Banner Coal. Of these, only the Clintwood coal seam located north of the Town and 20 to 100 feet below the surface, can be mined. The other seams can not be mined because of the presence of shale partings, their lack of thickness, and their occurring depth. With the exception of the Clintwood seam, it is likely that the other formations are still intact.

It is fortunate that only limited strip and deep mining has taken place in the immediate vicinity of the Town and the peripheral planning areas.

Strip mining is utilized to remove thin seams of coal that are near the earth's surface. Ultimately, once the overburden has been removed and the coal has been extracted, the fill (debris) is pushed off the side of the mining bench. The discarded fill has very poor load bearing capacities because of its placement on steep slopes and the improper densification of its component materials which range from large pieces of rock to small stones. As a result of those characteristics, the fill is very likely to either settle or slide further down the embankment. Development of any strip mine bench should be undertaken only after a thorough examination of the site by a qualified engineering geologist or soils engineer.

The primary development problem caused by deep mining operations is subsidence. Subsidence is surface and subsurface movements of the earth that are related to active and abandoned underground mining activities. The development of a subsidence trough is generally a slow, progressive occurrence. Vertical subsidence resulting from mining operation is a function of the coal seam thickness and the method of support remaining within the extraction area. Support is generally provided by way of rooms and pillars. Once the mine is abandoned, however, there is no guarantee that the pillars will remain intact. Additional unrecorded mining activities may render the pillars too weak to provide adequate support for surface development. It is virtually impossible to accurately document the existence or extent of remaining pillars in abandoned mining operations.

Horizontal surface movements are also likely to occur during subsidence. As the trough develops, earth from the sides is pulled horizontally into the depression. Therefore, subsidence is very detrimental to development located not only within but also adjacent to the trough.

In both the Town and peripheral planning area soil is limited and scarce.

Major fills will probably be "rock-fill" or mostly rock-fill. In general, slope stability is a problem. Caution should be used in all cut and fill operations. Fill heights should not exceed 15

feet and cut heights should not exceed 20 feet.

The most common soils as designated by the unified soil classification system are SM (silty sand) SC (sandy clay) ML (low plasticity silt) and CL (low plasticity clay). Of these, the latter two types are the most prevalent. The anticipated California Bearing Ratio is 8 to 12 percent.

Resultant pavement thickness required in housing developments or light commercial areas would be 9 to 12 inches.

CLIMATE:

Precipitation, wind, and temperature are important for the future planning of such diverse elements as airports, large parking lots and reservoirs.

Clintwood has mild winters and warm summers. Temperatures range between 32° F and 40° F during the winter months and between 67° F and 71° F during the summer months. Extreme temperatures seldom occur but freezing spells do occur during the winter months. It is not uncommon for the temperature to occasionally reach 90° F or higher during the summer. The frost-free season usually lasts from early May to late September.

With total precipitation between 45 and 50 inches annually, Clintwood is within one of the wettest regions of the United States. Because of the surrounding mountainous terrain, a wide variation in amounts of precipitation may occur. Precipitation is distributed evenly throughout

the year with 51 percent occurring during the growing season. Approximately 10 drought days, or one-half of the total drought days, occur during the growing season. During the summer, hard showers or thunderstorms from the west and northwest and slow steady rains from the east and the northeast are typical. Although severe snow storms do occur, snowfall is generally not a significant part of the total annual precipitation.

VEGETATION

In Clintwood, where precipitation is abundant and the terrain is rugged, the effects of vegetation, including foliage, root composition, and density are crucial for controlling surface runoff and erosion.

One of the primary functions of vegetation is to limit surface runoff. Surface runoff occurs only when the intensity of a rainfall exceeds the infiltration capacity of the soil. Vegetation protects the soil by decreasing the intensity, forcing the rain to pass through protective filters provided by both trees and grasses.

Erosion, the actual destruction of the soil, is a function of both slope and surface runoff. Surface runoff by itself is not damaging but when combined with the gravitational component of slope the increased water velocity causes a greater amount of soil movement. Slopes covered by rooted trees, grasses and abundant leaf litter are not as vulnerable to erosion as are bare slopes.

Pine, oak, hickory, beech and birch are the dominant species found in the Clintwood area. Pines and other scrub growth are found where soil and/or wind conditions are not as favorable for growth. The oaks and hickories predominate the lower levels while the birch and beech trees are generally found at higher elevations.

There are also many other types of low growing shrubs and ground covers including dogwood, rhododendron, mountain laurel, wild azalea, redbud, mountain spurge, arbutus, St. John's wort, and trailing wolfsbane which serve to stabilize and protect the soils in Clintwood and the neighboring areas.

CHAPTER 2

EXISTING LAND USE

EXISTING LAND USE AND BUILDING CONDITIONS

The Town occupies one square mile of area in the northwest quadrant of Dickenson County. In addition to the Town, the Consultants examined the existing land use and building conditions within 2 peripheral planning areas adjacent to the eastern and western corporate limits. These areas comprise 355 acres (.55 sq. miles) and 305 acres (.48 miles) respectively.

The Town has not been divided into neighborhoods. The data is presented for the Town, the western peripheral planning area and the eastern peripheral planning area.

In July of 1980 and March of 1981 the Consultants, in conjunction with the Town of Clintwood, conducted a survey of the use of lands in Clintwood and the peripheral planning areas as well as an examination of the condition of all principle structures. The results and subsequent revisions are presented on the Existing Land Use Map and the Building Conditions Map on display in the Town Hall Building. (Also see Appendix B.)

It should be noted that the principle land use is depicted on the map in all instances of mixed use except where residential/non-residential mixed use occurs, and in those cases the non-residential use is depicted. The acreage of land use shown in the following tables is based upon the Existing Land Use Map.

The condition of each principle structure was defined in accordance with the following criteria:

- * Condition A - Indicates buildings in sound condition in need of normal routine maintenance only.
- * Condition B - Indicates buildings with deficiencies in need of corrective measures significantly beyond those associated with routine maintenance.
- * Condition C - Indicates buildings with deficiencies to an extent that is considered impractical to repair.

EXISTING LAND USE, BUILDING AND HOUSING CONDITIONS - WESTERN PERIPHERAL PLANNING AREA

EXISTING LAND USE

	ACRES	% OF AREA	<u>BUILDING CONDITIONS</u>				TOTAL
			A	B	C		
Single Family	25.0	8.2	Single Family	55	4	2	61
Two-Family	-	-	Two-Family	-	-	-	-
Multi-Family	-	-	Multi-Family	-	-	-	0
Mobile Home	1.8	.6	Mobile Home	11	-	-	11
Retail and Service	3.2	1.0	Retail & Service	7	-	-	7
Commercial			Commercial				
General Commercial	2.1	.7	General Commercial	7	-	-	7
Office & Institutional	.7	.2	Office & Institutional	3	-	-	3
Light Industrial	-	-	Light Industrial	-	-	-	0
Heavy Industrial	-	-	Heavy Industrial	-	-	-	0
Parks and Open Space	.5	.2					
Vacant	250.0	82.0	TOTAL	83	4	2	89
Railroad Right-of-Way	-	-					
Street Right-of-Way	21.7	7.1					
TOTAL	305	100.0					

NOTE: The categories of conditions A, B and C used above and below are defined on page 11.

HOUSING ANALYSIS

	<u>OCCUPIED HOUSING UNITS</u>				<u>VACANT HOUSING UNITS</u>				<u>TOTAL HOUSING UNITS</u>			
	A	B	C	TOTAL	A	B	C	TOTAL	A	B	C	TOTAL
Single Family	50	2	-	52	5	2	2	9	55	4	2	61
Two-Family	-	-	-	0	-	-	-	0	-	-	-	0
Multi-Family	-	-	-	0	-	-	-	0	-	-	-	0
Mobile Home	11	-	-	11	-	-	-	0	11	-	-	11
Mixed-Use Apartment	-	-	-	0	-	-	-	0	-	-	-	0
TOTAL	61	2	0	63	5	2	2	9	66	4	2	72

Source: Land Use and Building Conditions:

Field survey conducted by Town of Clintwood and Balzer and Associates July, 1980 and March, 1981.

Housing Data:

Survey conducted by Town of Clintwood - July, 1980 and March, 1981.

EXISTING LAND USE, BUILDING AND HOUSING CONDITIONS - TOWN OF CLINTWOOD

EXISTING LAND USE

	ACRES	% OF TOWN	BUILDING CONDITIONS				TOTAL
			A	B	C		
Single Family	113.7	17.8	Single Family	206	106	12	324
Two-Family	.9	.1	Two-Family	6	-	-	6
Multi-Family	-	-	Multi-Family	-	-	-	0
Mobile Home	26.5	4.1	Mobile Home	158	2	1	161
Retail and Service Commercial	10.1	1.6	Retail & Service Commercial	43	3	-	46
General Commercial	5.2	.9	General Commercial	15	5	1	21
Office & Institutional	23.1	3.6	Office & Institutional	52	4	-	56
Light Industrial	4.7	.7	Light Industrial	4	-	-	4
Heavy Industrial	.1	.01	Heavy Industrial	1	-	-	1
Parks and Open Space	3.7	.5					
Vacant	409.7	64.0	TOTAL	485	120	14	619
Railroad Right-of-Way	-	-					
Street Right-of-Way	41.8	6.5					
TOTAL	640	100%					

NOTE: The categories of conditions A, B and C used above and below are defined on page 11.

HOUSING ANALYSIS

	OCCUPIED HOUSING UNITS				VACANT HOUSING UNITS				TOTAL HOUSING UNITS			
	A	B	C	TOTAL	A	B	C	TOTAL	A	B	C	TOTAL
Single Family	201	93	6	300	5	13	6	24	206	106	12	324
Two-Family	6	-	-	6	-	-	-	0	6	-	-	6
Multi-Family	-	-	-	0	-	-	-	0	-	-	-	0
Mobile Home	145	2	1	148	13	-	-	13	158	2	1	161
Mixed-Use Apartment	38	3	-	41	5	1	-	6	43	4	-	47
TOTAL	390	99	6	495	23	14	6	43	413	112	13	538

Source: Land Use and Building Conditions:

Field survey conducted by Town of Clintwood and Balzer and Associates July, 1980 and March, 1981.

Housing Data:

Survey conducted by Town of Clintwood - July, 1980 and March, 1981.

EXISTING LAND USE, BUILDING AND HOUSING CONDITIONS - EASTERN PERIPHERAL PLANNING AREA

	ACRES	% GFA AREA			BUILDING CONDITIONS			TOTAL
		A	B	C	A	B	C	
Single Family	29.4	8.3	-	-	63	5	3	71
Two-Family	-	-	-	-	-	-	-	0
Multi-Family	-	-	-	-	-	-	-	0
Mobile Home	1.2	-	33	-	-	-	-	0
Retail and Service	-	-	-	-	-	-	-	0
Commercial	4.5	1.3	-	4	2	-	-	7
General Commercial	-	-	-	-	-	-	-	0
Office & Institutional	11.6	3.3	-	-	-	-	-	6
Light Industrial	-	-	-	-	-	-	-	0
Heavy Industrial	-	-	-	-	-	-	-	0
Parks and Open Space	2.2	.61	-	-	-	-	-	2
Vacant	288.1	81.1	-	-	-	-	-	0
Railroad Right-of-Way	-	-	-	-	-	-	-	0
Street Right-of-Way	-	-	-	-	-	-	-	0
TOTAL	395	5.0	100.0	-	76	7	3	86

NOTE: The categories of conditions A, B and C used above and below are defined on page II.

HOUSING ANALYSIS

	OCCUPIED HOUSING UNITS			VACANT HOUSING UNITS			TOTAL HOUSING UNITS		
	A	B	C	A	B	C	A	B	C
Single Family	61	5	-	66	2	3	63	5	3
Two-Family	-	-	-	0	-	-	-	-	-
Multi-Family	-	-	-	0	-	-	-	-	-
Mobile Home	-	-	-	0	-	-	-	-	-
Mixed-Use Apartment	7	-	-	7	-	-	7	-	-
TOTAL	-	-	-	0	-	-	0	-	-
	58	5	0	73	2	3	5	70	5

Source: Land Use and Building Conditions:
Field survey conducted by Town of Clintwood and Balzer and Associates July, 1980 and March, 1981.
Housing Data:
Survey conducted by Town of Clintwood - July, 1980 and March, 1981.

PAST LAND USE TRENDS

In the preparation of the future land use, community facilities and major thoroughfare plans it is necessary to assess past development trends in order to determine future land use requirements. The following table describes the trends which have occurred Clintwood and the peripheral planning areas, 1977-1981.

NEW CONSTRUCTION BUILDING PERMITS ISSUED TOWN OF CLINTWOOD AND PERIPHERAL PLANNING AREAS - 1977-1981¹

BUILDING TYPE	TOWN OF CLINTWOOD	PERIPHERAL PLANNING AREAS	TOTAL
Single Family ²	36	12	48
Mobile Home	30	5	35
Other Residential	0	0	0
Commercial & Trade	2	4	6
Office and Institutional	1	1	2
Industrial	0	0	0
TOTAL	69	22	91

January 1 - June 30, 1981

²Number of single family and mobile home units estimated using Dickenson County building permit data and where appropriate, aerial photographs.

Sources: Tayloe Murphy Institute
Building Inspector, Town of Clintwood
Balzer and Associates, Inc.

The greatest amount of development activity has occurred within the residential sector. Eighty-three building permits were issued for the construction of new single family and mobile home dwelling units within the Town of Clintwood and the peripheral planning areas. In addition, permits were issued for the construction of 8 new commercial, trade, office and institutional facilities.

ACREAGE UTILIZED FOR NEW CONSTRUCTION SINCE 1977

CLINTWOOD, VIRGINIA

<u>LAND USE</u>	<u># OF NEW UNITS</u>	<u>ACREAGE PER UNIT</u>	<u>TOTAL ACREAGE</u>
Single Family	36	.35	12.60
Mobile Home	30	.16	4.80
Commercial & Trade	2	.22	.44
Office & Institutional	1	.41	.41
			<u>18.25</u>

Source: Balzer and Associates

ACREAGE UTILIZED FOR NEW CONSTRUCTION SINCE 1977

PERIPHERAL PLANNING AREA

<u>LAND USE</u>	<u># OF NEW UNITS</u>	<u>ACREAGE PER UNIT</u>	<u>TOTAL ACREAGE</u>
Single Family	12	.41	4.92
Mobile Home	5	.16	.80
Commercial & Trade	4	.57	2.28
Office & Institutional	1	3.0	3.0
			<u>11.0</u>

Source: Balzer and Associates

Eighteen acres of vacant land in the Town of Clintwood were converted to active use between January 1977 and July 1981. The corresponding amount of newly developed land in the peripheral planning areas for the same time period was 11 acres. Based on this past combined rate of 6.5 acres per annum, an additional 124 acres of undeveloped or uncommitted land will be required for development within the Town and the peripheral planning area by the year 2000. Of this amount, 78 acres will be needed in the Town, 46 acres will be required in the planning areas. This projected need is dependent upon the continuation of the current per annum population growth rate and the availability of land economically and environmentally suitable for development. (For further discussion of future land use requirements please see page 94)

LOW- AND MODERATE-INCOME HOUSING

The Small Cities Community Development Block Grant Program (CDBG) was established to assist small cities and communities like Clintwood that have high concentrations of impoverished citizens and substandard housing by expanding low- and moderate-

income housing opportunities and meeting community development needs. The Community Development Program is especially significant in smaller cities and towns where budgetary allotments tend to be residual after important operating, maintenance, health, and social service responsibilities are met.

The nature of the CDBG program necessitates the establishment of "target areas" for the purpose of upgrading the total physical environment. There are no more large scale urban renewal or slum clearance programs that completely eliminate all urban problems. Instead, the CDBG program tends to be incremental, demanding an incremental approach to community problem solving. With CDBG annual funding, which in any one year is small in comparison with the total amount needed, effective planning requires a realistic long-term plan for orderly assistance to neighborhoods and "target areas."

To facilitate the provision of this assistance, the Consultants identified all housing occupied by low- and moderate income persons. Low- and moderate-income persons were defined as those whose annual income was less than \$12,004 per year, which was 80 percent of the Statewide non-metro median income, as defined by the United States Department of Housing and Urban Development in October, 1980. The results are as follows:

LOW- AND MODERATE-INCOME HOUSING - CLINTWOOD AREA

TOTALS	TOWN	PERIPHERAL PLANNING AREA	TOTAL
HOUSEHOLDS	501	136	637
ELDERLY HEAD	145	40	185
FEMALE HEAD	164	25	189
HANDICAPPED HEAD	24	29	53
L/M HOUSEHOLDS	226	69	295
PERCENT OF ALL HOUSEHOLDS	45.1%	50.7%	46.3%
L/M PERSONS	531	170	701
L/M ELDERLY HEAD	101	35	136
L/M FEMALE HEAD	117	20	137
L/M HANDICAPPED HEAD	19	23	42
L/M UNITS SOUND	79	58	137
L/M UNITS NOT SOUND	54	5	59
L/M MOBILE HOMES	93	6	99
L/M HOMES OWNED	157	58	215
L/M HOMES RENTED	69	11	80

Source: Survey conducted by Town of Clintwood
Balzer and Associates

CHAPTER 3

COMMUNITY FACILITIES

COMMUNITY FACILITIES

The quality of community facilities is the best indication of the quality of life in any community. Facilities for education, recreation, administration and police and fire protection are essential components of a viable community.

As centers of common use, community facilities provide for basic needs and serve as centers and symbols of community life. Good community facilities enhance residential values as well as add to the corporate image, thereby attracting more industries and strengthening the tax base on which community facilities are created and maintained.

A survey of the existing community facilities in Clintwood was undertaken by the Consultants in the Fall of 1980 to ascertain the size, location, type, capacity and physical condition of each facility. An evaluation of each facility was accomplished by comparing the facility system with tested community planning principles and standards of space (current distribution, growth potential, area requirements) and location (convenience, performance and security).

The facility systems included in this study are:

1. Education including public schools and the community library.
2. Governmental Services including police protection, emergency services and administrative

facilities.

3. Recreation including neighborhood parks, athletic playfields and playgrounds.

PUBLIC SCHOOLS

Pupils residing in the Town of Clintwood and the peripheral planning areas are served by the Clintwood High School (grades 8-12) and the Clintwood Elementary School (grades K-7). Each of these facilities is owned and administered by the Dickenson County School Board. The 1976 and 1981 enrollments and enrollment capacity for each school are presented on the next page:

CLASSROOM CAPACITY AND ENROLLMENTS BY SCHOOL

ENROLLMENT 1976	ENROLLMENT 1981	CAPACITY	VACANT SPACES	
			1976	1980
Clintwood H.S. 714	680	520	0	0
Clintwood E.S. 614	717	700	86	0
TOTAL	1,328	1,397		

Source: Dickenson County School Board

Preliminary Draft, Dickenson County Comprehensive Plan

Constructed in 1954, the Clintwood High School is situated on a 36 acre site immediately adjacent to Primary Route 83 within the corporate limits of Clintwood. A football stadium and track facility are also located on the site. The location of the high school promotes convenient ingress and egress for both school buses and passenger cars. Safe pedestrian access from the nearby housing areas is aided by the availability of sidewalks along most of the major roadways and the virtual lack of traffic on many of the local residential streets.

The Clintwood Elementary School was completed in 1977 and is located on a 21 acre site adjacent to Route 607 approximately three-quarters of a mile east of the Town's corporate limits. The facility is situated within the eastern peripheral planning area. Because of the school's relatively remote location, most of student enrollment uses bus transportation. The distance from the Town's residential areas and the lack of safe pedestrian access have acted to discourage effective usage of the school site as a community recreation area.

School sites of adequate size are imperative to the development of the community. The increasing use of one-story buildings, the expanded utilization of school facilities for adult education programs and community

recreation areas, and the requirements for off-street parking facilities are creating demands for school sites of increasing size. The standards of the State Board of Education pertaining to size and location are as follows:

1. The minimum size for usable school sites shall be as follows:

- a. Elementary schools - 5 acres, plus 1 acre for each 100 pupils to be enrolled.
- b. High School - 30 acres, plus 1 acre for each 100 pupils to be enrolled.

2. Safe drinking water and sewage disposal at a safe distance from the source of the water supply shall be provided on all school sites.

3. The location of the building on the site shall provide for future expansion.

4. The site shall be accessible to state or county highways with careful consideration being given to safe exit and entrance.

5. The site shall slope enough for drainage but not be too steep for use as a playground.

6. The site shall be away from objectionable noises, odors and other hazards that would produce an unpleasant environment.

Each of the two school sites is of an adequate size, however much of the area behind the high school is too steep to allow for an economical expansion of the building.

The most significant issue, however, is the intensity of use of each school building. The number of users should be the major determinant of facility size. In a clear application of sound business

principles, supply, or classroom capacity should respond to demand. In response to such principles, it is incumbent upon public decision makers to invest in those facilities which are designed to most nearly satisfy current and anticipated future needs.

All of the County schools serving Clintwood's students are over-crowded. Although serious, this problem is beyond the scope of this document. As a part of the Dickenson County School System, it is the responsibility of the Dickenson County Board of Supervisors and members of the School Board to address the issues of current and potential overcrowding or under-utilization of all school facilities in the system. A partial examination of only those facilities used by Clintwood's pupils may result in an investment by the County for a building designed for a level of anticipated use that is significantly greater than subsequent need. This type of policy can lead to unnecessarily high tax bills for Town and County residents. Under-estimating future demands can also have serious consequences although less critical in effect. It is always possible to add facilities if subsequent realized need exceeds projected needs; it is not so easy to dispose of a large surplus school capacity.

LIBRARY FACILITIES

The Lonesome Pine Regional Library System, with a new branch facility located in Clintwood, provides services to Dickenson County and the residents of Clintwood. In addition to the regular services, elderly and handicapped persons residing in the Town and the County may participate in a books by mail program. The four-county regional system has a total collection of 266,500

volumes. Of these, 53,000 volumes are located in the Clintwood-Dickenson County branch and two smaller facilities located in Haysi and Clinchco. In 1980 - 81, the total circulation of these 3 branches was 107,195 volumes.

The American Library Association, Subcommittee on Standards for Small Libraries recommends that a library system servicing an area such as Dickenson County should have at least 2 volumes per capita with a maximum of 175,000 volumes. The Dickenson County portion of the Lonesome Pine Regional System far exceeds this standard. In addition, the ALA recommends that a branch facility, such as the one serving the Town of Clintwood and the surrounding hinterland should contain at least 25,000 volumes. The Clintwood-Dickenson county branch surpasses this goal.

Clintwood is very well served by the current regional system. An additional facility should not be needed within the Town before the year 2000.

ADDITIONAL EDUCATIONAL FACILITIES:

The Dickenson County vocational and Technical School, located in Clinchco provides instruction to those county students who desire additional training in a craft or trade. Classes are available for both high school students and adults. Clintwood High School offers an industrial cooperative program which allows a student to work part-time and to study part-time. Three colleges are located in the region and serve the residents of Clintwood and Dickenson

County. Clinch Valley College, a part of the University of Virginia, is located in the Town of Wise. Mountain Empire Community College is situated southeast of Big Stone Gap and Southwest Virginia Community College is located in the Town of Richlands.

Clinch Valley College is a four year state supported institution that offers Bachelor of Arts and Bachelor of Science degrees as well as two year terminal and transfer programs. Mountain Empire Community College and Southwest Virginia Community College are also state supported and offer Associate of arts, Associate of Science, and Associate of Applied Science degrees as well as certificates in number of programs.

POLICE PROTECTION:

The Town of Clintwood Police Department is supervised by a chief of police and consists of 2 officers. The department operates an average patrol of 16 hours per day with emphasis on security and enforcement. The Clintwood Police Department exceeds the acceptable standard of 1.5 officers per 1,000 persons. As the Town's population grows, this ratio should be matched or exceeded.

The Police Department headquarters is located in the rear of the Town Hall. Currently, the portion of the building devoted to the department has a separate entrance so that the public may visit other Town departments without passing through the police area. This situation is architecturally and administratively desirable and should be maintained.

Clintwood does not maintain a jail or a 24-hour lock up facility. Currently the Town uses the Dickenson County correction and detention facility located in Clintwood and operated by the County Sheriff's Department.

EMERGENCY SERVICES

The Town of Clintwood Fire Department is controlled by the Town under the terms contained within the Town Charter. The fire station is centrally located in the Town but has storage accommodation for only 3 pieces of equipment. Currently, the Town owns 2 750 gallons per minute pumper trucks, 1 older 500 gallons per minute pumper truck, a tank truck and a utility vehicle. The equipment is operated by 27 on-call volunteer firefighters.

The Clintwood Fire Department serves approximately 10,000 persons who reside in the western one-third of Dickenson County. The peripheral planning areas are within this service area. The independent fire departments of Haysi and McClure River are responsible for the remaining two-thirds of Dickenson County.

Clintwood's fire department exceeds the National Board of Fire Underwriters recommendations of 1.6 to 2.4 personnel per 1,000 population. The entire Town of Clintwood can be reached in less than ten minutes travel time, the period considered to be the maximum in order to avoid major losses of property. Not all of the service area can be reached within ten minutes, however.

The Town of Clintwood is served by a unit of the volunteer Dickenson County Rescue Squad.

The Clintwood Fire Department and Rescue Squad are independent organizations, but work closely with each other and other emergency service agencies.

The Clintwood-Dickenson County area is served by four hospitals. Three are located in Norton, 30 miles southwest of Clintwood. The other is situated in Grundy, 24 miles east of the Town. The southern portion of the County is also served by the Lebanon General Hospital located in Russell County.

The Dickenson Health Clinic has its office in Clintwood. The clinic is staffed by 4 general practitioners. Emergency room care is available 7 days a week until 11 P.M.

ADMINISTRATIVE FACILITIES

The Town of Clintwood administrative offices (Town Clerk, Accounting Clerk and Building Inspector) are located in the Town Hall Building situated on Main Street in the central business district. The Dickenson County administrative offices are also located on Main Street in the Dickenson County Courthouse. The Dickenson County School Board offices are located on Route T-1003 near the Town water storage tank.

PARKS AND RECREATION

Clintwood residents have access to a variety of parks and recreation facilities. Within the Town are the high school athletic fields and tennis courts situated on a 2.7 acre site immediately adjacent to Clintwood High School. A football stadium and track facility constitute an additional 5.0 acres. A 2 acre playground and play field area is located behind the Clintwood Elementary School. There are no neighborhood parks in the Town or the peripheral planning areas.

In addition to these community facilities, 2 regional parks, the John W. Flannagan Reservoir and the Breaks Interstate Park provide facilities for camping, hiking, swimming, boating and fishing. Both of these parks are located in Dickenson County. The Jefferson National Forest, a portion of which is located in Dickenson County, is also accessible to Clintwood's residents.

The location of a community's parks and recreation facilities is the primary factor that affects the amount of use. The Town has effectively utilized the centrally located Clintwood High School as an outdoor athletic area and should continue to do so. However, there are no neighborhood parks or play areas situated within the corporate limits. The playground facility behind the Clintwood Elementary School is too great a distance from the Town's residential areas and is not safely accessible by foot or bicycle.

The Heritage Conservation and Recreation Service (formerly the Bureau of Outdoor Recreation) of the U. S. Department of the Interior suggests the following space standards for neighborhood

facilities.

- * 1.25 acres/I ,000 population for playgrounds - usually part of a school ground.
- * 1.25 acres/I,000 population for play fields - active sports activities such as baseball, football and soccer.
- * 2.0 acres/1,000 population for neighborhood parks in multi-family areas.
- * .75 acres/1,000 population for neighborhood parks in single-family areas.

With the predominance of single-family housing in Clintwood, approximately 4.0 acres of neighborhood facilities are needed for every 1,000 persons. Combining this standard with the 1980 planning area population estimate of 1,850 persons, approximately 7.4 total acres of playgrounds, play fields and neighborhood parks are necessary to adequately serve the citizenry. Including the Clintwood Elementary School playground and the high school athletic fields, the Town currently has a total of 4.7 acres. By the year 2000 with an estimated population of 2,531 persons, 5.4 additional acres of parkland will be required for the residents of the Town and the peripheral planning area.

In conclusion, the Consultants must emphasize that parks and recreation space does not

necessarily constitute service. In this and any future analysis the question of how good is as important as how much.

CHAPTER 4

THOROUGHFARE SYSTEM

THOROUGHFARE AND SERVICE STREET SYSTEM

The Town of Clintwood's existing thoroughfare and service street system includes the arterial and major collector streets that are essential to the economic, efficient, and safe movement of people and goods within and through the Town and the local streets and service alleys that are intended to serve adjacent land uses.

Arterial streets function primarily to move large volumes of vehicles from one part of the community to another. Access to and from adjacent land uses is secondary, although adjoining commercial development is common.

Major collector streets are conduits which channel vehicles from local streets to arterial routes and generators such as shopping centers, schools or community centers. Although this class of street often serves contiguous land uses, direct residential access is discouraged.

Local streets exist solely to provide access to an adjacent land use.

Service alleys provide access to utility services and allow access for garbage pickup and the loading and unloading of merchandise.

Clintwood and its peripheral planning areas are served by one State primary highway, Route 83. Route 83 is the major east-west thoroughfare transferring both the Town and Dickenson County. Route 83 connects to U. S. Route 23 at Pound about 20 miles west of Clintwood and intersects with U. S. Route 460 at Vansant in Buchanan County approximately 25 miles east of Clintwood.

A network of State secondary roads provides easy access to all parts of the Clintwood and Dickenson County areas. These routes are as follows: Route 631, Route 607 and Route 672.

The following tables examine the average daily traffic volumes on the primary and secondary routes that constitute Clintwood's existing thoroughfare system.

AVERAGE DAILY (24 hours) TRAFFIC VOLUME ON PRIMARY ROUTE 83

IN THE CLINTWOOD AREA, 1980

ROUTE NUMBER

83	Passenger	Single Unit	Trailer	Buses	Total
	Cars	Trucks	Trucks		
* Vansant to Haysi	2,525	2,560	50	20	5,235
* Haysi to Rt. 63 (Clinchco)	1,610	1,000	20	25	2,655
* Rt. 63 (Clinchco) to Rt.	1,420	960	20	15	2,415
* Rt. 63 Fremont via	2,290	1,780	35	15	4,120
<u>Clintwood to Georges Fork</u>					
* Georges Fork to Pound	2,440	1,840	40	30	4,350

AVERAGE DAILY (24 Hours) TRAFFIC VOLUMES ON SELECTED STATE
SECONDARY ROADS IN THE CLINTWOOD AREA, 1976-1980

<u>ROUTE</u>	<u>YEAR</u>			<u>INCREASE OR DECREASE 1978 to 1980</u>	<u>LENGTH in MILES</u>
	<u>1976</u>	<u>1978</u>	<u>1980</u>		
<u>T 607 (Main Street)</u>					
° Rt 83 to Rt T1003	10,674	10,741	10,798	57	.11
° Rt T1003 to Rt T1001	10,400	10,433	10,415	-18	.05
° Rt T1001 to Rt T672	8,280	8,299	8,312	13	.20
° Rt T672 to Rt T1010 West Int.	2,662	2,681	2,654	-27	.22
° Rt T1010 West Int. to Rt T1010 East Int.	1,840	1,881	1,868	-13	.07
° Rt T1010 East Int. to ECL of Clintwood	1,622	1,649	1,656	7	.12

607

° ECL of Clintwood to Rt 733	1,482	1,561	1,573	12	.37
° Rt 733 to Rt 736	1,422	1,522	1,541	19	.93

T-631 (Brush Creek Road)

° NCL Clintwood to Rt 83	1,502	1,596	1,613	17	.40
° Rt 83 to Rt T1014	300	388	399	11	.02

T-672

° Rt T607 to Rt T1005	2,092	2,198	2,234	36	.13
° Rt T1005 to Rt T1013	1,660	1,785	1,803	18	.22
° Rt T1013 to ECL Clintwood	380	401	412	11	.07

672

° ECL Clintwood to Rt 707	380	589	602	13	.04
° Rt 707 to Rt 1018	276	350	362	12	.25

Source: Commonwealth of Virginia, Department of Highways and Transportation,
Division of Traffic and Safety.

ADDITIONAL OBSERVATIONS AND CONCLUSIONS

- The traffic volumes on all arterial and major collector streets in the Clintwood area have remained relatively stable during the study period.
- The greatest average daily traffic volumes were consistently recorded on Route T-607 (Main Street), but only in the central business district. This pattern suggests that the central business area of the Town is a destination for many persons living outside of the corporate limits.
- Access to the Town's only shopping center is difficult.
- There are few off-street parking areas.
- Circulation throughout the Town is impeded by an extreme number of very narrow streets. In addition, many service alleys are being used as local streets for the purpose of serving adjacent residential and commercial land uses. A lack of turning lanes compounds the problem.

The following table describes the existing street pavement widths in the Town and the peripheral planning areas. (Note: right-of-way width of Route 83 in corporate limits is approximately 50 feet. All other routes have an approximate right-of-way width of 30 feet. The corresponding widths in the peripheral planning areas are approximately 110 feet and 40 feet respectively.)

TOWN OF CLINTWOOD

Pavement Width (feet)	10	15	20	25	30	35
Length (Miles)	.44	4.3	4.5	.13	.45	.75

Total Length 10.57 miles

EASTERN PERIPHERAL PLANNING AREA

Pavement Width (Feet)	10	15	20	25	30	35
Length (Miles)	.15	1.4	1.0	.72	.28	.10

Total Length 3.65 miles

WESTERN PERIPHERAL PLANNING AREA

Pavement Width (Feet)	10	15	20	25	30	35
Length (Miles)	.60	1.7	-	-	-	.74

Total Length 3.04 miles

Source: Balzer and Associates

The major thoroughfare plan will address these issues while emphasizing a distribution and storage system that will provide the motor vehicle user with viable options when he arrives in the vicinity of the downtown.

CHAPTER 5

UTILITIES

CHAPTER 5

UTILITIES

Revised in 1998

by Weldon Cooper Center for Public Service,
University of Virginia Southwest Virginia Office

Utilities

This section of the Comprehensive Plan will examine the existing facilities, in 1998, used by the Town of Clintwood for the provision of clean potable water, the removal of waste water, and disposal of solid waste material. Clintwood Water System Existing Water Supply and Storage Residents of Clintwood, the Town of Grundy and portions of Dickenson, Buchanan and Tazewell Counties are served by a water purification and distribution system owned and operated by the John W. Flannagan Water Authority. Raw water is obtained from the John W. Flannagan reservoir, a flood management facility completed in 1966 by the U.S. Army Corps of Engineers. After purification, water from the reservoir is pumped approximately 19 miles in to a one-half million gallon storage tank north of Clintwood's central business district. From this point water flows through the filtration system (owned, maintained, and operated by the town) to Town of Clintwood water customers.

The John W. Flannagan filtration plant has a designed production capacity of four (4) million gallons of finished potable water per day. This is an enlargement of the plant from its original two (2) MGD production capacity.

The town's total capacity to store potable water is 1,900,000 gallons. This capacity is provided with four (4) town owned water storage tanks. One is a 500,000 gallon tank on Mullins Ridge (mentioned above). One is a 600,000 gallon tank at Red Onion. Two are at the Dickenson County Technical Park and hold 500,000 and 300,000 gallons respectively. The town shares use

of a fifth tank with the county Public Service Authority. That tank holds 200,000 gallons.

Existing Water Distribution System:

The 1981 edition of Clintwood's comprehensive plan makes reference to the need for a "fire flow" of 1,500 gallons a minute in its water distribution system. It said this was necessary for adequate fire protection" in a town the size of Clintwood. Deficiencies in the town's water distribution system at that time were cited as an obstacle to achieving proper fire protection. Management of the town's water system since that time has included a policy of unrelenting annual investments in the upgrading of the grid of distribution lines.

Today, the deficiencies cited in the 1981 plan are largely addressed. It is also noteworthy that a draw of 1,500 gallons per minute could be sustained for two hours by the towns smallest water tank even if the draw began with the tank filled to only 60% of capacity. (1,500 gals. x 120 minutes = 180,000 gallons. 60% of smallest tank at 300,000 gals. = 180,000 gallons.)

The improved state of Clintwood's water distribution system is also partly responsible for the town's ability to maintain a Class 5 ISO (Insurance Services Office) fire protection rating. This rating translates into fire insurance premiums for commercial properties in Clintwood 10% to 20% lower than for comparable properties located in Dickenson County outside of Clintwood's fire and water service area.

Existing Water Consumption and Water Losses:

There are 1,706 metered water users connected to the Town of Clintwood system. Of these, 902 are located in the town and 804 are located outside the town's corporate limits. "Accountability" is the term used in the water utility industry to denote the percentage of treated water (or wholesale purchased water) for which a system can account as product delivered to customers or users. For example: If Clintwood purchased ten(10) million gals. of water from the J.W. Flannagan Authority in a given month and recorded metered sales of only six (6) million gals. during the same time frame, Clintwood's accountability would be calculated as 60%.

In fact, Clintwood's accountability, on a monthly basis, holds consistently in at least the mid 80's with frequent recordings of over 90%. This is very good by industry standards, and certainly compares favorably with many water utilities in southwest Virginia. Unaccounted for water can be the result of a number of things including undetected leakage, fire department operations, water line & storage tank maintenance, and the tendency of water meters to allow more water to pass through them than is recorded as their internal moving parts wear with age.

In 1997, the daily transfer of water from the John W. Flannagan Authority to the Town of Clintwood was in a range of 300,000 to 340,000 gallons. The town's recorded monthly sales convert to a daily average approaching 300,000 gallons.

Sanitary Sewerage Facilities:

Clintwood's sanitary sewerage treatment plant was built in 1988 as a replacement for a smaller inadequate facility built in 1963. The town's NPDES (National Pollutant Discharge Elimination System) permit provides for a discharge of up to .49 MGD or 490,000 gals. per day of treated effluent into the Crane's Nest River. A secondary treatment facility, the plant is located on route 607 near Holly Creek.

The Town of Clintwood contracts with Professional Services Group, Inc. (PSG) for the operation and maintenance of it's sewerage treatment plant. PSG's services include all administrative matters and testing connected to the town's NPDES permit issued by the state DEQ (Dept. of Environmental Quality). It also handles all operational and permitting requirements connected to the land application of sludge produced as a by-product at the plant.

Normal flow to the sewer plant averaged approximately 220,000 gals. per day in 1997, less than one half the plant's capacity. During some rain events, inflow and infiltration (171) entering the town's sanitary sewer collector system consumes the treatment plant's entire capacity. Permit limitations have not been violated, but I & I does present a challenge in the maintenance of the town's sanitary sewer collector system. The seepage of ground water into sewer lines increases naturally as pipe joints, manholes, lid seals, etc. age, but a vigilant guard needs to be kept against intentional violations such as the connection of roof drains. Treating rain water with sanitary sewerage not only costs a community unnecessary financial expense but also robs it of potential

capacity to accommodate new economic growth.

Solid Waste Disposal:

Dickenson County participates with Buchanan and Russell Counties in a regional solid waste authority operated by the Cumberland Plateau Planning District. The Town of Clintwood delivers solid waste to the regional authority's transfer station in Fremont, approximately six miles west of town.

Residential refuse customers in the Town of Clintwood receive weekly curb-side pick-up service and are charged a fee of \$5.25 per month. Commercial service is geared to the specific needs of customers with a graduated fee structure starting at \$8.25 per month. The town role in solid waste disposal is limited to pick-up and transport to Fremont. The regional authority currently transports the refuse to Hawkins County, Tenn., where it is disposed of in the Carter Valley Landfill. The authority's operating costs are \$59.90 per ton.

In 1997, the Town of Clintwood generated an approximate average of 156 tons of solid waste per month.

Utilities - Summary

At the time of the original drafting of this comprehensive plan, in 1981, the term "infrastructure" was not in popular use. Utilities are clearly part of those things to which that term applies in the context of local government today. Clintwood certainly deserves high marks for its assiduous efforts over more than the last one and one-half decade to improve its utilities infrastructure.

CHAPTER 6

ECONOMIC ANALYSIS

ECONOMIC ANALYSIS

An understanding of the structure and functioning of Clintwood's urban economy is fundamental to all land use planning analysis and policy statements contained within this document. The purpose of this analysis is to define, describe and examine the economic characteristics of Clintwood by reviewing pertinent economic activities, employment, employment trends and income statistics.

ECONOMIC ACTIVITIES:

Mining:

Coal mining is currently and historically the major industrial activity and source of income in the Clintwood-Dickenson County area. In July of 1980, 20 percent of the employed persons residing in the Town were directly affiliated with the coal industry. In March of 1979, 54 percent of the persons employed by firms operating in Dickenson County (including Clintwood) were working within the coal mining industry.

In the first quarter of 1981, a payroll of \$15,142 million was disbursed by 66 coal mining establishments operating in Dickenson County. This amount was 84 percent of the total 1981 first quarter payroll of \$18,075 million paid by all establishments licensed to operate in the County. By comparison, in 1979 the mining industry in Virginia constituted only 1.9 percent of the State's total payroll and only 1 percent of the State's total employment. (Note: Bituminous

coal mining comprises approximately 85 percent of Virginia's total mining activities.)

Dickenson County is one of 7 coal producing counties in southwestern Virginia. In 1979, the coal extracted from this area was valued at \$1.14 billion, sixth among the nation's coal producing states. The value of coal mined in Dickenson County in 1979 was approximately \$220 million.

The Federal Power Commission has designated 5 primary coal producing regions within the United States. In 1975, the Appalachia region, of which Dickenson County is a part, produced 49 percent of the coal purchased by the nation's utility companies. Because of increased production anticipated in the western part of the country, this percentage is projected to decrease to 34 percent by 1985. This decrease reflects a shifting share of the coal market and not a reduction in demand. Nationally, coal production, after sluggish growth from 1973 to 1978 has experienced dramatic increases in 1979, 1980 and 1981. The primary cause has been greatly increased purchases of coal by both domestic and foreign utility companies responding to the rapid price increase of oil and the difficulties encountered in constructing and operating nuclear power plants. During the past two years, domestic electric utilities have not only consumed much larger amounts of coal but have also built up large stockpiles. Virginia is in a very favorable position for supplying coal to the export market via the Hampton Roads port facilities.

Manufacturing:

Manufacturing employed less than 4 percent of Clintwood's residents in 1980. In March of 1979, manufacturing firms employed only 5.9 percent of the persons working within Dickenson County. The total first quarter payroll in 1981 for Dickenson County's manufacturing concerns was \$535,854. This amount was less than 3 percent of the total first quarter payroll disbursed by all commercial and industrial establishments operating in the County. Seven manufacturing establishments are currently located within Dickenson County. Of these, only 1 is located in Clintwood. According to the Division of Industrial Development, there were no announcements in 1979 or 1980 of any new or expanding manufacturing firms in either the County or the Town.

The primary manufacturing businesses in Dickenson County produce clothing and lumber. The average hourly wage for manufacturing employees in Dickenson County is \$3.93, considerably lower than either the State (\$5.58) or the national (\$6.69) average.

The gross state product, an estimate of the value of all goods and services produced in the state in 1 year, totalled \$267,381.5 million in 1980. Of this amount, manufacturing accounted for 21.6 percent, as opposed to mining which contributed only 1.3 percent. Manufacturing has

PAYROLL AND NUMBER OF ESTABLISHMENTS BY INDUSTRY: FIRST QUARTER, 1981
 DICKENSON COUNTY AND STATE OF VIRGINIA

INDUSTRY ¹	QUARTERLY PAYROLL (\$1,000)		% OF QUARTERLY COUNTY PAYROLL	NUMBER OF ESTABLISHMENTS	
	DICKENSON COUNTY	STATE		DICKENSON COUNTY	STATE
Agriculture, Forestry & Fish	-	26,108	0	-	1,393
Mining & Quarrying	15,142	122,691	83.7	66	747
Construction	61	398,019	.3	15	13,835
Manufacturing	535	1,539,034	2.9	7	5,174
Transportation, Communication, Utilities	844	473,704	4.6	29	3,808
Trade	1,090	1,201,225	6.0	86	31,295
Finance, Insurance, Real Estate	74	352,803	.4	8	8,533
Services	327	1,141,826	1.8	40	30,997
TOTAL	18,075	5,255,414	100.0	251	95,782

¹Excludes government and railroad employees, self employed persons.

Source: Virginia Employment Commission

been and will continue to be vital to Virginia's economic balance. Therefore, it is important that manufacturing concerns be encouraged to locate within Dickenson County and Clintwood. Not only does manufacturing bolster the local economy by way of property and income taxes, purchases and payrolls, but it has one of the highest employment multipliers of any economic sector.

An employment multiplier occurs as a new or expanded industry injects income into the community that results in a cumulative (or multiplier effect on community income or employment that exceeds the initial input. The U. S. Chamber of Commerce has estimated that in rural areas, an increase of 68 nonmanufacturing jobs occurs for every increase of 100 factory workers. On an employment basis; therefore, the approximate multiplier effect for manufacturing in Clintwood is 1.68. Because of the Town's relative isolation, the effect may be even greater.

Trade and Service:

Retail and wholesale trade and service enterprises employed over 18 percent of Clintwood's residents in 1980. In March of 1979, trade and service activities employed 15.2 percent of the individuals working within Dickenson County. The total 1981 first quarter payroll for trade and service firms operating in Dickenson County was \$1,417,478, or 7.8 percent of the total first quarter payroll disbursed by all commercial enterprises in the County. Of the 277 trade and

service businesses operating in Dickenson County in 1981, approximately 95, or 34 percent are located in Clintwood.

Taxable sales (including motels, hotels, and selected other services but excluding automobiles, gasoline, and alcoholic beverages) in Dickenson County and Clintwood in 1979 were \$35 million, an increase of 3.6 percent from 1978. Taxable sales in Virginia in 1979 were \$17.8 billion, up 7.0 percent from 1978.

The chart on the following page, prepared from data published by the Virginia Department of Taxation, indicates that the growth rate of taxable sales in Dickenson County from 1971 to 1979 has been comparable to that of the State and the region. The Table demonstrates that the amount

of taxable sales in

¹Note: the rate of inflation between 1978 and 1979 was 11.5 percent.

TAXABLE SALES FOR VIRGINIA CITIES AND COUNTIES: 1979

TOTAL SALES	TOTAL DOLLAR SALES - 1979 (\$000)	INDEX OF CHANGE (1971=100)								
		1971	1972	1973	1974	1975	1976	1977	1978	1979
STATE	\$17,751,254	100.0	111.5	126.2	146.2	151.0	165.9	185.8	208.8	223.6
DICKENSON COUNTY	35,260	100.0	109.0	119.6	156.1	186.2	205.1	218.6	231.3	239.8
WISE COUNTY	121,927	100.0	113.0	128.6	163.4	192.4	213.1	231.2	243.2	250.3
BUCHANAN COUNTY	90,003	100.0	104.0	111.7	141.0	177.8	197.8	209.4	224.7	239.5
RUSSELL COUNTY	50,263	100.0	111.7	115.0	135.2	166.2	184.7	214.2	228.6	234.8
TAZEWELL COUNTY	158,470	100.0	117.2	129.4	144.6	173.0	191.2	211.5	234.3	253.5
REGIONAL AVERAGE	91,184.6									

GAF STORE SALES VIRGINIA CITIES AND COUNTIES: 1979

TOTAL SALES	TOTAL DOLLAR SALES - 1979 (\$000)	INDEX OF CHANGE (1971=100)								
		1971	1972	1973	1974	1975	1976	1977	1978	1979
STATE	5,527,084	100.0	110.3	125.4	142.2	142.6	156.8	175.8	197.2	204.3
DICKENSON COUNTY	7,065	100.0	107.8	116.1	156.0	164.5	164.2	166.1	166.0	171.1
WISE COUNTY	25,403	100.0	127.7	159.6	193.1	182.1	197.7	212.7	221.4	217.6
BUCHANAN COUNTY	25,473	100.0	104.9	112.5	137.8	155.6	167.7	179.7	183.3	191.0
RUSSELL COUNTY	15,054	100.0	121.6	138.4	169.7	165.8	183.7	207.2	225.2	233.5
TAZEWELL COUNTY	38,384	100.0	131.9	135.5	149.1	171.4	183.4	195.9	205.1	228.7
REGIONAL AVERAGE	22,275.8									

Source: Virginia Department of Taxation

in 1979 however, was far below the regional average of \$91,184,600. Careful examination reveals that the most significant retail growth has paralleled increases in coal mining activity.

GAF sales (general merchandise, apparel, furniture and appliances) in Dickenson County and Clintwood in 1979 were \$7 million, an increase of 3.0 percent from 1978. However, the County's and Town's GAF sales in 1979 were substantially lower than GAF sales transacted in the neighboring Counties of Buchanan, Wise, Tazewell and Russell. GAF sales in Virginia advanced 3.6 percent from 1978 to 1979. The table on the preceding page documents these findings as well as the index of change for GAF sales in the State and the region.

Sales Tax Revenue:

Sales tax revenue is generally a reliable indicator of economic health. Patrons of businesses in Clintwood pay a sales tax of 4 percent for every \$1 spent. Of this 4 percent, 1 percent is returned from the State to the County for local option, 1 percent is allocated by the State to all local school districts according to student membership and 2 percent is retained by the State.

In Dickenson County yearly sales made during the calendar year ending December 31, 1979 as reflected by deposits of sales tax revenues totaled \$35,260,451. In 1980 this figure had increased 4.3 percent to \$36,763,180. The consultants estimate that of these amounts sales transacted in Clintwood accounted for \$11,988,553 and \$12,499,481 respectively. Based on these estimates, it is clear that Clintwood is the retail trade center of Dickenson County.

EMPLOYMENT

Employment analyses and forecasts serve two primary purposes: they provide information necessary for population studies which in turn are used for determining space needs for residential areas and community facilities, and they aid in estimating commercial and industrial land use requirements.

Note: The rate of inflation between 1978 and 1979 was 11.5 percent.

Current Employment

Employment in the Town of Clintwood totaled 469 workers in July of 1980. This represents 34.3 percent of the Town's 1980 total population. Of these 469 workers, 220, or 47 percent, are employed within the Town. An additional 157 workers commute to places of employment in Dickenson County. The remaining 92 persons work in Wise, Buchanan, Tazewell or Russell Counties or in the adjacent counties of Kentucky.

Future Employment:

There are 2 primary means of forecasting future employment: the analytical method and the short-cut method. The analytical method develops employment projections by analyzing probable future production and worker output data. In essence, future demand for a particular good or service is determined. The short-cut method chosen for this analysis is much simpler, utilizing one or more employment statistics directly.

Projection Methodology:

A simple step-down procedure was developed to derive categorical employment projections for the year 1990. This methodology is founded upon the principle that local employment trends are

a function of national trends and that by using a carefully conceived national forecast a reasonably accurate local estimate may be developed.

TOTAL EMPLOYMENT
TOWN OF CLINTWOOD, JULY, 1980

<u>POPULATION</u>	1980	% OF TOTAL
<u>EMPLOYMENT</u> ¹	1,369	
Manufacturing	18	3.8
Non-Manufacturing	451	96.1
Mining	96	20.5
Construction	11	2.3
Transportation, Communication & Public Utilities	17	3.6
Trade	60	12.8
Finance, Insurance & Real Estate	19	4.0
Services	25	5.3
Government	133	28.4
Agricultural	0	0
Other Non-Agricultural (including self-employed)	90	19.2
TOTAL	469	100.0

¹Employment data based on place of residence not place of work.

Sources: Survey by Town of Clintwood
Balzer and Associates

Projections for the Town of Clintwood were computed by using the current employment by place of residence figures for the Town and employment projections, 19781990 prepared by the United States Bureau of Labor Statistics. The national forecasts were calculated using the most recent data pertaining to population, industry, occupational employment, productivity and consumer expenditures. In addition, the Bureau's projections were based on the following assumptions:

- * Inflation will decelerate to 5.2 percent annually during 1980-1990.
- * A stable, long-run unemployment rate close to 4.5 percent will be achieved by the mid-1980's.
- * Higher energy prices will not constrain growth in gross national products.
- * The institutional framework of the U. S. economy will not change radically
- * Current social, technological, and scientific trends will continue.
- * No major event such as widespread or long lasting energy shortages or war will significantly alter the industrial structure of the economy or alter the rate of economic growth.

A per annum percentage increase as determined for each employment category, 1978-1990, by the Bureau of Labor Statistics was applied to the August, 1980 estimated labor force components of the Town of Clintwood. The results are as follows:

EMPLOYMENT PROJECTIONS, TOWN OF CLINTWOOD

<u>INDUSTRIAL CATEGORY</u>	<u>1980 TOWN EMPLOYMENT¹</u>	<u>PROJECTED PER ANNUM PERCENTAGE INCREASE</u>	<u>1990 TOWN PROJECTED EMPLOYMENT¹</u>
Manufacturing	18	1.3	20
Coal Mining	96	1.7	112
Transportation, Communications, Utilities	17	.88	18
Trade	60	2.3	74
Services	25	4.4	36
Finance-Real Estate	19	2.8	24
Construction	11	1.4	13
Government	133	1.1	148
Other	90	2.0	108
TOTAL	469	2.0	553

¹ Employment figures denote place of residence not place of work.

Source: U. S. Department of Labor, Bureau of Labor Statistics
 Survey conducted by Town of Clintwood
 Balzer and Associates, Inc.

Manufacturing:

Population increases and rising incomes have increased demands for almost all types of goods, but improved methods of production have and will continue to limit employment growth.

Employment grew more slowly in manufacturing than in any other sector between 1965 and 1978. Between 1980 and 1990, however, employment in durable goods manufacturing is expected to increase substantially.

Coal Mining

As the nation's need for energy increases in the next decade, employment in the mining sector is expected to grow significantly.

Transportation - Communications - Public Utilities

Employment in the railroad and water transportation industries will continue to slowly decline. Other forms of transportation such as trucking and air transit will increase steadily.

The demand for communication equipment as well as electric power, gas utilities, water and sanitary services will increase as the population grows and more households and businesses are formed. Technological advances in the systems required to provide these services will moderately restrict future employment growth.

Trade:

Employment growth in the retail and wholesale industries will parallel increases in population and income. Retail employment is projected to increase much faster than wholesale employment.

Services:

Service employment which includes hotels, barber shops, auto repair shops, business services, hospitals and nonprofit organizations is projected to increase dramatically between 1980 and 1990. Employment opportunities in health care are expected to grow rapidly due to population growth - especially the elderly and rising incomes that increase people's ability to pay for medical care. Business services, including accounting, data processing and maintenance are also expected to increase.

Finance - Real Estate:

Employment in this sector is expected to rise in order to meet increasing consumer demand for credit and other financial services.

Construction:

The Department of Labor projects that during the early 1980's, the demand for new housing will remain high because the number of households is expected to increase. Expansion of businesses and maintenance of existing buildings will also require more construction employment.

Government

It is expected that new government programs will not be enacted because of the public's desire to limit government growth. However, school employment will rise moderately in response to the immigration of school age children accompanying adults employed by the coal mining industry and its service affiliates

INCOME

Personal income is made up of wage and salary disbursements, proprietors' income, rental income of persons, dividends, personal interest income, and transfer payments. Although most personal income is in a monetary form, there are several exceptions such as (1) wages and salaries paid in kind; (2) the net rental value of owner-occupied houses; (3) the net value of food and fuel produced and consumed on farms; and (4) imputed interest received by persons from financial intermediaries. Capital gains are not included in personal income principally because they are not attributable to current economic activity. Personal income is measured before deduction of income and other personal taxes, but after deduction of Social Security taxes, government retirement, and other social insurance programs.

Total Personal Income by Place of Residence

The total personal income of the residents of the State increased \$18,418 billion (70 percent) between 1974 and 1979. The total personal income of those persons residing in Dickenson County increased 87 percent for the same time period. The estimated amounts of total personal income for the residents of Clintwood during the period 1974-1979 are presented on the following page:

"Personal Income Estimates for Virginia Counties and Cities," 1973-1978, p.7. Tayloe Murphy Institute

TOTAL PERSONAL INCOME BY PLACE OF RESIDENCE, 1974-1979 (millions of dollars)

	1974	1975	1976	1977	1978	1979	# CHANGE	% CHANGE
State of Virginia	\$26,212	\$28,738	\$31,997	\$35,431	\$39,687	\$44,630	\$18,818	70%
Dickenson County	68.0	81.4	86.4	94.7	98.1	127.8	59.7	87% Clintwood
(estimated)	5.1	6.1	6.1	6.5	6.6	8.5	3.4	67% Source: Regional Economics

Informational System Bureau of Economics

Per Capita Personal Income

The per capita personal income of Dickenson County residents increased between 1969 and 1979. In 1969, the County's per capita personal income was \$1,870 or 55% of the State average

of \$3,400. By 1979 the County's per capita personal income had risen to \$6,340 or 73% of the State average, ranking the County 95 out of 136 Virginia localities. It is assumed that the per capita personal income of Clintwood's residents is equivalent to that of the County.

PER CAPITA INCOME 1974-1979

	1974-1979							
	1974	1975	1976	1977	1978	1979	# CHANGE	% CHANGE
State of Virginia	\$5,339	\$5,770	\$6,333	\$6,955	\$7,666	\$8,588	\$3,249	61%
Dickenson County	3,827	4,531	4,538	4,829	4,941	6,340	2,513	66%

Source: Regional Economics Information System

Bureau of Economics

Low and Moderate Income

Low- and moderate-income persons are defined as those whose annual income is less than \$12,004 per year, which is 80% of the Statewide non-metro median income, as defined by the United States Department of Housing and Urban Development in October 1980.

In July of 1980, there were 226 low- and moderate-income households in the Town of Clintwood. These households constituted 45.1 percent of all the households in the Town. Approximately 533 persons resided in these households.

In March of 1981, there were 69 low- and moderate-income households in the peripheral planning areas. These households comprise 50 percent of all the households located in these areas.

CHAPTER 7

POPULATION ANALYSIS

POPULATION ANALYSIS

Analysis of current and future population size is the foundation for almost all major planning decisions. Current and future demands for community services and facilities as well as land for residential, commercial and industrial purposes are directly affected by the size, composition, and spatial distribution of the population. Population size indicates the basic amounts of land required for the various types of uses. When a time element is introduced and future population trends are projected) these trends become the basis for calculating future community service facility and spatial requirements. Population composition encompasses age, household size and income levels, all of which are indices of the types and extent of services and facilities as well as policies required by the community. An examination of population distribution reveals the most functional location for future land uses, community services and facilities, and public utilities. Therefore, the population analysis of the Town of Clintwood is necessary as a means of defining the scale, location and temporal considerations of future public and private development within the Town and its environs.

CURRENT POPULATION SIZE:

Between 1940 and 1980, the Town of Clintwood experienced an increase in population of 263 persons, a net gain of 23.8 percent. The population of the Town in 1940 was 1,106. The 1980 final population count as prepared by the Bureau of the Census indicates that 1,369 persons reside in the Town. A 1981 survey conducted by the Consultants reveals that an additional 481

persons live within the Town's peripheral planning area. The current total population of Clintwood and its planning area is 1,850.

POPULATION GROWTH:

The Town of Clintwood's total population has increased on the average of .6 percent per annum since 1940. However, as may be seen in Figure I, this growth has not been continuous. The Town's population increased 27 percent from 1940 to 1960. Between 1960 and 1970 the Town experienced a 6 percent decline in population. Since the 1970 census the Town's population increased from 1,320 persons to the current total of 1,369 persons, a gain of 3.7 percent or a growth rate of .4 percent per annum.

By seeing aerial photographs and the standard of 3.0 persons per household, the Consultants were able to establish that 336 persons resided in the Town's peripheral planning area in 1970. Between 1970 and 1980, this area experienced a 43 percent increase in population or a per annum growth rate of 4.3 percent.

In summary, the population of the Town of Clintwood and its peripheral planning area grew from 1,656 person in 1970 to 1,850 person in 1980, an increase of 12 percent.

The Dickenson County Comprehensive Plan and the 1990 Report of the U.S. Census Bureau show population trends for the County, including the Town of Clintwood, as follows:

POPULATION TRENDS

1950-1990, Clintwood, Virginia

YEAR	TOWN POPULATION	NUMBER CHANGE	% CHANGE
1950	1,366		
1960	1,400	34	2.4
1970	1,320	-80	-5.7
1980	1,369	49	3.7
1990	1,542	173	12.6

Source: Virginia Statistical Abstract, 1996-97 Edition, Weldon Cooper Center for Public Service.

POPULATION TRENDS

1950-1990 Dickenson County, Virginia

YEAR	COUNTY POPULATION	NUMBER CHANGE	% CHANGE
1950	23,393		
1960	20,211	-3,182	-13.60%
1970	16,077	-4,134	-20.40%
1980	19,806	3,729	23.20%
1990	17,620		

Source: Virginia Statistical Abstract, 1996-97 Edition, Weldon Cooper Center for Public Service.

LOCATION

LOCATION	1980	1990	% CHANGE	1980-1990 % ANNUAL GROWTH
Clintwood Town	1,369	1,542	12.6	1.3
Dickenson County	19,806	17,620	-11.0	-1.1
Scott County	25,068	23,204	-7.4	-0.7
Buchanan County	37,989	31,333	-17.5	-1.8
Tazewell County	50,511	45,960	-9.0	-0.9
Russell County	31,761	28,667	-9.7	-1.0
Washington County	46,487	45,887	-1.3	-0.1
Lee County	25,956	24,496	-5.6	-0.6
Wise County	42,343	39,573	-6.5	-0.7
Norton City	4,757	4,247	-10.7	-1
Wise Town	3,891	3,894	0.08	0.008
Bristol City	19,042	18,426	-3.2	-0.3

Source: Virginia Statistical Abstract, 1996-97 Edition, Weldon Cooper Center for Public Service.

BIRTH AND DEATH RATES PER 1,000 TOTAL POPULATION

Dickenson County

Births No.	1990	
	Rate	Deaths No.
185	10.8	179

Deaths
No.
Rate

Source: Virginia Statistical Abstract, 1996-97 Edition, Weldon Cooper Center for Public Service.

CURRENT AGE GROUP POPULATION		
Town of Clintwood		
AGE GROUP	NUMBER	PERCENT
0-5	73	4.7%
5-14	175	11.3%
15-24	208	13.5%
25-34	191	12.4%
35-44	244	15.8%
45-54	177	11.5%
55-64	178	11.6%
Over 65	296	19.2%
TOTAL	1,542	100%

AGE GROUP	NUMBER	PERCENT	1990	CHANGE	
				NUMBER	PERCENT
0-18	363	26.5%	340	22.0%	-23 -6.3%
19-64	817	59.7%	906	58.8%	89 10.9%
Over 65	189	13.8%	296	19.2%	107 56.7%
TOTAL	1,369	100.0%	1,542	100%	173 61.3

Dickenson County

AGE GROUP	NUMBER	PERCENT
0-5	1,037	5.8%
5-14	2,827	16.0%
15-24	2,567	15.0%
25-34	2,680	15.2%
35-44	2,668	15.1%
45-54	2,030	11.5%
55-64	1,664	9.4%
Over 65	2,147	12.0%
TOTAL	17,620	100%

Source: 1990 Census

RACE

LOCATION	TOTAL POPULATION		TOTAL MINORITY POPULATION		% MINORITY	
	1980	1990	1980	1990	1980	1990
Clintwood	1,369	1,542	10	7	0.73	0.45
Dickenson County	19,806	17,620	115	99	0.58	0.56
Source: 1990 Census						

HOUSEHOLD SIZE

LOCATION	POPULATION		OCCUPIED HOUSING UNITS		PERSONS/UNIT	
	1980	1990	1980	1990	1980	1990
Clintwood	1,369	1,542	573	672	2.38	2.29
Dickenson County	19,806	17,620	6,290	6,457	3.14	2.72
Source: 1990 Census						

POPULATION DENSITY			
LOCATION	POPULATION	AREA IN SQUARE MILES	PERSONS PER SQUARE MILE
Clintwood Town	1,542	1.9	812
Haysi Town	222	0.9	246
Norton City	4,247	7.3	582
Pound Town	995	2.6	383
Wise Town	3,193	3.0	1,064

Source: Virginia Statistical Abstract, 1996-97 Edition, Weldon Cooper Center for Public Service.

PROJECTED POPULATION			
YEAR	DICKENSON COUNTY		
1995	16,994		
2000	16,397		
2005	16,050		
2010	15,702		

YEAR	Clintwood		
1991	1,530		
1992	1,577		
1993	1,580		
1994	1,583		

Source: Virginia Statistical Abstract, 1996-97 Edition, Weldon Cooper Center for Public Service.

INDUSTRY

Town of Clintwood

Employed Persons 16 Years & Over

Agriculture, Forestry & Fisheries	0
Mining	97
Construction	30
Manufacturing, Non durable Goods	27
Manufacturing, Durable Goods	4
Transportation	12
Communications & Other Public Utilities	13
Wholesale Trade	8
Retail Trade	72
Finance, Insurance, & Real Estate	26
Business & Repair Services	6
Personal Services	17
Entertainment & Recreation Services	7
Professional & Related Services	48
Health Services	102
Educational Services	39
Other Professional & Related Services	58
Source: 1990 Census	

OCCUPATION

Town of Clintwood

Managerial & Professional Specialty Occupations:	
Executive, Administrative, & Managerial Occupations	63
Professional Specialty Occupations	115
Technician, Sales, & Administrative Support Occupations:	
Technicians & Related Support Occupations	12
Sales Occupations	57
Administrative Support Occupations, Includes Clerical	77
Service Occupations:	
Private Household Occupations	2
Protective Service Occupations	17
Service Occupations, Except Protective & Household	51
Farming, Forestry, & Fishing Occupations	5
Precision Production, Craft, & Repair Occupations	70
Operators, Fabricators & Laborers:	
Machine Operators, Assemblers, & Inspectors	24
Transportation & Material Moving Occupations	37
Handlers, Equipment Cleaners, Helpers, & Laborers	14

Source: 1990 Census

PER CAPITA PERSONAL INCOME

	1993	1992	1991	1990
Virginia	\$21,853	\$20,883	\$20,046	\$19,791
Dickenson County	\$14,281	\$13,788	\$13,435	\$13,630

Source: Virginia Statistical Abstract, 1996-97 Edition, Walston Cooper Center for Public Service,

PROJECTED MEDIAN FAMILY INCOME					
	1996	1995	1994	1993	1992
Virginia	\$47,549	\$46,096	\$44,643	\$43,919	\$42,258
Dickenson County	\$21,643	\$21,456	\$21,289	\$24,929	\$24,221
Source: Virginia Statistical Abstract, 1996-97 Edition, Weldon Cooper Center for Public Service.					
PROJECTED MEDIAN HOUSEHOLD INCOME					
	1996	1995	1994	1993	1992
Virginia	\$41,470	\$40,203	\$38,936	\$37,202	\$35,839
Dickenson County	\$18,085	\$17,928	\$17,789	\$21,514	\$20,919
Source: Virginia Statistical Abstract, 1996-97 Edition, Weldon Cooper Center for Public Service.					

CHAPTER 8

FINANCIAL ANALYSIS

FINANCIAL ANALYSIS

The purpose of this study is to determine the relative financial capability of the Town of Clintwood to undertake a program of capital improvements to support the developmental growth in the Town as envisioned by the future land use element of this document.

The analysis includes an evaluation and comparison of the past revenues and expenditures, from fiscal years 1972 through 1981, as well as a review of the Town's assessable basis and outstanding bonded indebtedness for fiscal year 1981.

GENERAL OPERATING FUND

General Operating Revenues

As stated in the municipal audits 1972-1980, general operating revenues increased every year. From a level of \$152,552 in 1972-74, general operating revenues rose to \$228,323 in 1978-1980. The budgeted revenues in 1980-82 were estimated to be \$307,642. This budgeted amount represents a significant increase in revenues, not mere compensation for inflation. (Note: To account for inflation, adjust values using constant dollars - Appendix C.; Some of the major sources of revenue are discussed as follows: (Also see Table 1)

* Property Taxes increased from a total of \$37,796 in 1972-74 to \$41,453 in 1978-80. This is

an increase of \$3,657 during the period and represents an overall increase of 9.6 percent or 1.2 percent per annum. The estimated property tax revenue for 1980-82 is \$47,000.

* Local Sales Tax increased \$13,256 from 1972-74 to 1978-80. An overall increase of 103 percent or 12.9 percent per year. (Note: Local sales tax is disbursed by Dickenson County to the Town on the basis of school children, not sales volume.) The estimated local sales tax revenue for 1980-82 is \$24,500.

* Refuse removal fees received increased by 81 percent from 1972-74 to 1978-80 or 10 percent per year.

General Operating Expenditures:

As stated in the municipal audits 1972-1980, general operating expenditures have increased from \$108,161 in 1972-74 to \$294,718 in 1978-80. This rise of \$186,557 represents an average annual increase of almost 22 percent per year. The average inflation rate during the same period was 8.3 percent. The major expenditures are briefly discussed below. (Also see Table 2.)

* Insurance costs have increased dramatically since 1972. Hospital, automobile and workman's compensation insurance have increased from a combined amount in 1972-74 of \$6,624 to \$36,325 in 1978-80. This represents a rise of \$29,701 or a percentage increase of 448 percent.

* Fuel and power costs have also increased significantly during the study period.

* Police and Fire Departments combined increased from \$36,358 in 1972-74 to \$70,709 in 1978-80. This is an overall increase of 94 percent or almost 12 percent per year. The budgeted amount for 1980-82 is \$80,138.

* Refuse collection has increased more than \$15,400 between 1972 and 1980.

This is an overall increase of 67 percent or 8.4 percent per year.

Comparison of Past General Operating Revenues and Expenditures

A comparison of the general operating revenues and expenditures for the period 1972 to 1980 indicates that revenues have increased an average of 6.2 percent per year while expenditures have increased an average of almost 22 percent per year. Table 3 shows that in 1978-80 general operating expenditures exceeded revenues by more than \$66,000.

An examination of the municipal audits 1972-1980 reveals that the Town has maintained financial equilibrium only by way of short term bank loans and a modest amount of cash in bank savings.

UTILITY FUND

The Town of Clintwood maintains a separate water and sewer department budget. User charges (as opposed to tax revenues or licensing fees) for water and sewer services are imposed to pay

operational expenses and to retire bonds that financed previously constructed facilities.

Tables 4 and 5 indicate that during the period 1972-1980, water department expenditures exceeded revenues by an average of \$7,078 per year. Sewer department expenditures surpassed revenues by an average of \$3,185 per annum.

TABLE 1

TOWN OF CLINTWOOD GENERAL REVENUE BY SOURCE, 1972-1982

<u>REGULAR</u>	<u>1972-1974</u>	<u>1974-1976</u>	<u>1976-1978</u>	<u>1978-1980</u>	<u>BUDGETED 1981</u>	<u>BUDGETED 1982</u>
Parking Meters	\$ 10,495.50	\$ 10,532.00	\$ 10,501.59	\$ 7,062.00	\$ 5,000.00	\$ 5,000.00
Traffic Violations	619.03	794.78	1,934.34	333.50	450.00	1,000.00
Garbage Fees	20,238.50	25,009.25	15,374.50	36,732.00	18,000.00	27,500.00
Merchants Licenses	4,372.50	4,917.50	6,055.00	5,520.50	3,000.00	3,000.00
Privilege & Professional Liceses	6,937.66	5,895.38	3,990.00	5,438.00	2,600.00	1,000.00
Building Permits	50.00	-	-	-	-	1,000.00
District Court Fines	9,031.75	9,180.75	3,950.77	3,848.69	3,000.00	3,000.00
Amusement Licenses	1,157.00	1,241.00	1,450.00	835.00	300.00	800.00
A.B.C. Funds	9,594.00	10,245.00	10,400.36	14,744.60	5,500.00	5,500.00
Property Tax	37,796.38	40,959.68	46,742.93	41,452.76	22,000.00	25,000.00
Auto Tags	12,015.00	12,850.00	8,474.50	13,690.00	7,000.00	7,000.00
Bank Stock Tax	19,876.78	38,398.06	43,322.36	61,974.14	30,500.00	33,000.00
Utilities Tax	1,128.25	1,791.78	5,028.36	6,101.90	3,000.00	3,500.00
Sales Tax	12,787.48	9,365.23	16,775.06	26,042.95	11,000.00	13,500.00
Trailer Sales	-	-	2,624.69	1,398.74	500.00	1,500.00
Trailer Park Licenses	-	-	780.00	1,095.00	500.00	1,200.00
Miscellaneous	870.42	652.12	1,744.46	790.59	1,050.00	500.00
TOTAL	\$146,970.25	\$171,832.53	\$179,148.92	\$227,060.37	\$113,400.00	\$133,000.00
OTHERS						
Grants	-	-	-	-	\$ 14,669.88	\$ 11,253.00
Reimbursements (Revenue Sharing)	-	-	-	-	16,000.00	18,000.00
Miscellaneous	-	-	3,930.85	1,262.71	-	1,320.00
Loan Payment	2,581.27	-	-	-	-	-
Sale of Equipment	-	-	2,081.50	-	-	-
Sale of Land	-	3,000.00	-	-	-	-
Bank Loan	-	-	-	-	-	-
Board of Supervisors	3,000.00	-	-	-	-	-
Cumberland Plateau	-	-	-	-	-	-
TOTAL	\$ 5,581.27	\$ 3,000.00	\$ 6,012.35	\$ 1,262.71	\$ 30,669.88	\$ 30,573.00
TOTAL RECEIPTS	\$152,551.52	\$174,832.53	\$185,161.27	\$228,323.08	\$144,069.88	\$163,573.00

Sources: Municipal Audits, Town of Clintwood
 Adopted General Fund Budget, Town of Clintwood, 1981 & 1982

TABLE 2

TOWN OF CLINTWOOD GENERAL GOVERNMENTAL EXPENDITURES BY FUNCTION, 1972-1982

	<u>1972-1974</u>	<u>1974-1976</u>	<u>1976-1978</u>	<u>1978-1980</u>	<u>BUDGETED 1981</u>	<u>BUDGETED 1982</u>
<u>POLICE DEPARTMENT</u>						
SALARIES	\$ 25,374.91	\$ 38,851.22	\$ 42,490.44	\$ 49,168.60	\$ 23,984.24	\$ 33,654.48
POLICE EXPENSES	7,915.76	14,082.76	11,661.36	16,549.94	8,300.00	8,700.00
TOTAL	\$ 33,290.67	\$ 52,933.98	\$ 54,151.80	\$ 65,718.54	\$ 32,284.24	\$ 42,354.48
<u>WAGE COLLECTION</u>						
SALARIES	\$ 16,709.43	\$ 20,676.22	\$ 20,358.17	\$ 27,559.36	\$ 15,536.40	\$ 16,696.26
TRUCK EXPENSES	6,160.32	9,659.53	6,894.25	10,738.88	8,000.00	8,000.00
TOTAL	\$ 22,869.75	\$ 30,335.75	\$ 27,252.42	\$ 38,298.24	\$ 23,536.40	\$ 24,696.26
<u>RE DEPARTMENT</u>						
GENERAL EXPENSES	\$ 2,516.51	\$ 1,329.30	\$ 4,466.61	\$ 3,242.91	\$ 800.00	\$ 800.00
TRUCK EXPENSES	550.28	1,483.15	2,635.89	1,747.56	2,200.00	1,700.00
TOTAL	\$ 3,066.79	\$ 2,812.45	\$ 7,102.50	\$ 4,990.47	\$ 3,000.00	\$ 2,500.00
<u>WORKING METER COSTS</u>	\$ 610.13	\$ 59.70	\$ 742.88	\$ 106.11	\$ -	\$ 500.00
<u>TO STICKER COSTS</u>	\$ 369.60	\$ 193.05	\$ 419.25	\$ 590.30	\$ 300.00	\$ 350.00
<u>CITY HALL ADMINISTRATION</u>						
SALARIES	\$ 5,090.15	\$ 7,083.54	\$ 8,469.93	\$ 18,219.52	\$ 16,698.84	\$ 13,744.07
SUPPLIES & POSTAGE	752.73	1,731.35	2,640.19	2,435.67	900.00	1,000.00
TELEPHONE	304.42	395.57	1,869.43	2,680.53	1,100.00	2,000.00
AND POWER	711.77	636.63	1,506.35	2,430.18	900.00	2,100.00
TOTAL	\$ 6,859.07	\$ 9,847.09	\$ 14,485.90	\$ 25,765.90	\$ 19,598.84	\$ 18,844.07
<u>ROLL COSTS</u>						
TAXES	\$ 3,755.04	\$ 5,420.23	\$ 4,069.83	\$ 7,900.65	\$ 5,000.00	\$ 5,000.00
HOSPITAL INSURANCE	2,066.39	3,840.06	3,639.36	5,843.35	4,417.00	3,500.00
TOTAL	\$ 5,821.43	\$ 9,260.29	\$ 7,709.19	\$ 13,744.00	\$ 9,417.00	\$ 8,500.00
<u>REET MAINTENANCE</u>	1,640.58	22,701.37	19,147.82	26,976.95	26,671.40	20,392.77
REET CLEANING	9,377.99	19,310.48	18,295.47	23,689.79	-	-
PAIRS & SUPPLIES	870.42	1,449.11	2,039.37	1,854.98	600.00	1,500.00
WER	8,421.98	9,545.48	14,926.31	14,149.70	-	-
TORNEY FEES	425.00	1,504.83	2,982.59	2,331.57	1,200.00	1,500.00
COUNTING FEES	-	-	4,225.56	6,823.05	3,201.00	2,800.00
SURANCE	4,558.30	7,072.00	10,957.40	30,482.56	18,200.00	10,425.00
LECTION EXPENSES	1,193.50	890.22	1,388.05	1,175.50	-	2,500.00
UNCILMAN'S EXPENSES	5,625.73	8,579.22	9,948.98	11,237.18	500.00	500.00
X COLLECTION EXPENSES	300.00	-	1,050.00	900.00	500.00	500.00
ABEL	200.00	75.00	-	643.54	500.00	250.00
TEREST ON LOANS	343.70	-	-	-	-	-
IRVEYING	-	480.00	485.00	10.00	-	200.00
SCELLANEOUS	2,315.95	1,937.28	12,189.23	11,471.51	4,500.00	2,000.00
TER DEPARTMENT	-	-	-	13,758.50	-	-
CONTRIBUTION	-	-	-	-	1,000.00	1,000.00
VERTISING	-	-	-	-	-	2,000.00
W BUILDING EXPENSES	-	-	-	-	-	15,000.00
YMENT ON LOANS	-	-	-	-	-	-
TOTAL EXPENSES	\$108,160.59	\$178,987.30	\$209,499.72	\$294,718.39	\$145,008.88	\$158,312.58

MUNICIPAL AUDITS, TOWN OF CLINTWOOD
 ADOPTED GENERAL FUND BUDGET, TOWN OF CLINTWOOD, 1981 & 1982

TABLE 3

TOWN OF CLINTWOOD - COMPARISON OF TOTAL RECEIPTS AND TOTAL EXPENDITURES

	<u>GENERAL OPERATING FUND 1972-1982</u>			
FISCAL YEARS	<u>1972-1974</u>	<u>1974-1976</u>	<u>1976-1978</u>	<u>1978-1980</u>
TOTAL RECEIPTS	\$152,551.52	\$174,832.53	\$185,161.27	\$228,323.00
TOTAL EXPENDITURES	108,169.59	178,987.30	209,499.72	294,718.39
DIFFERENCE	44,390.93	(4,154.77)	(24,337.73)	(66,395.31)
CUMULATIVE DIFFERENCE	44,390.93	40,236.16	15,898.43	(50,496.88)
				(51,435.98)
				(45,175.46)

Source: Municipal Audits, Town of Clintwood
 Adopted General Fund Budgets, Town of Clintwood, 1981 and 1982

TABLE 4

TOWN OF CLINTWOOD

WATER DEPARTMENT COMPARATIVE STATEMENT OF RECEIPTS AND DISBURSEMENTS4 YEARS ENDED JUNE 30, 1980

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>BUDGETED 1981</u>	<u>BUDGETED 1992</u>
<u>RECEIPTS</u>						
Water	\$100,817	\$119,599	\$126,499	\$125,536		
Hock-Ups	4,280	6,375	8,505	2,995		
Interest			22	138		
Disaster Flood Relief	<u>2,695</u>					
<u>TOTAL RECEIPTS</u>	<u>\$107,793</u>	<u>\$125,974</u>	<u>\$135,026</u>	<u>\$128,663</u>	<u>\$132,980</u>	<u>\$216,000</u>
<u>EXPENDITURES</u>						
Office Salaries	\$ 3,340	\$ 4,129	\$ 7,071	\$ 12,865		
Gross Payroll	43,305	44,721	50,470	55,669		
Employee Taxes and Fringe Benefits	4,233	4,141	5,133	8,927		
Workmens Compensation	1,055	1,206	1,594	1,916		
Bond Interest	19,000	30,072	18,807	16,885		
Bond Retirement		2,262	3,537	3,719		
Professional Fees		1,454	2,293	2,508		
Permits & Licenses	114	438	375	85		
Office Supplies	983	1,769	1,589	1,883		
Water Supplies	9,860	12,612	20,871	20,460		
Electricity	10,049	11,524	10,883	13,699		
Telephone	803	645	657	699		
Chemicals	2,924	3,362	3,984	1,634		
Pipe				10,000		
Gas & Oil - Truck	2,537	3,093	1,840	3,290		
Repairs	1,847	4,453	4,242	5,091		
Meters	1,713	2,477	1,194	729		
Pumps	5,544	1,100	4,428	1,216		
Equipment Rental	235	50	690	8,472		
Contract Services				5,029		
Stone	942	786	301	1,261		
Water Purchase	205	495	420	599		
Position Bonds				425		
Miscellaneous	410	168	1,154	810		
Cash Difference				4,111		
Drilling Expense		1,393				
<u>TOTAL EXPENDITURES</u>	<u>\$109,099</u>	<u>\$132,361</u>	<u>\$141,520</u>	<u>\$181,672</u>	<u>\$142,795</u>	<u>\$208,379</u>
<u>EXCESS OF RECEIPTS OVER DISBURSEMENTS</u>	<u>\$ (3,305)</u>	<u>\$ (6,377)</u>	<u>\$ (6,494)</u>	<u>\$ (53,203)</u>	<u>\$ (9,815)</u>	<u>\$ 7,621</u>

Source: Municipal Audits, Town of Clintwood
 Adopted Budget, Town of Clintwood, 1981 and 1982
 Water Fund

TABLE 5

TOWN OF CLINTWOOD

SEWER DEPARTMENT COMPARATIVE STATEMENT OF RECEIPTS AND DISBURSEMENTS

	4 YEARS ENDED JUNE 30, 1980				BUDGETED	BUDGETED
	1977	1978	1979	1980	1981	1982
<u>RECEIPTS</u>						
Sewer Receipts	\$43,991	\$44,698	\$45,753	\$50,132		
Hook-Ups	200	300	465	250		
Interest and Other Income	951	220	231	110		
<u>TOTAL RECEIPTS</u>	<u>\$45,142</u>	<u>\$45,298</u>	<u>\$46,449</u>	<u>\$50,492</u>	<u>\$46,400</u>	<u>\$84,000</u>
<u>EXPENDITURES</u>						
Office Salaries	\$ 2,038	\$ 4,220	\$ 2,648	\$ 2,376		
Gross Payroll	10,701	11,208	11,427	24,018		
Payroll Taxes & Fringe Benefits	1,002	802	1,815	3,601		
Bond Interest	4,688	4,313	3,971	3,503		
Bond Retirement	10,000	10,000	10,000	15,000		
Bank Service Fee	68	135	32	34		
Professional Fees		1,454	1,309	1,301		
Office Supplies	264	370	94	444		
Sewer Supplies	2,018	3,070	3,017	1,436		
Licenses - Permits	10	22	15	10		
Electricity	2,117	2,032	1,915	1,546		
Telephone		46		226		
Chemicals	12,755	9,795	2,593	4,574		
Gas & Oil	522	445	2	773		
Repairs	909	417	336	1,140		
Equipment Rental	153	1,193	1,000	953		
Cleaning Sewer Lines		817	495	228		
Miscellaneous	96	17	39	836		
Cash Difference				<u>12,356</u>		
<u>TOTAL EXPENDITURES</u>	<u>\$47,338</u>	<u>\$50,361</u>	<u>\$40,708</u>	<u>\$74,452</u>	<u>\$60,748</u>	<u>\$82,526</u>
<u>EXCESS OF RECEIPTS OVER DISBURSEMENTS</u>	<u><u>\$2,196</u></u>	<u><u>\$(5,063)</u></u>	<u><u>\$ 5,741</u></u>	<u><u>\$(23,960)</u></u>	<u><u>\$(14,348)</u></u>	<u><u>\$ 1,474</u></u>

Source: Municipal Audits, Town of Clintwood
 Adopted Sewer Fund Budget, 1981 and 1982

ASSESSED VALUATION:

The assessed valuation of the Town of Clintwood has increased from \$1,046,270 in 1975 to \$22,107,340 in 1981. Prior to 1980, all real estate and public service corporations were assessed at 10 percent of their fair market values. Mobile homes were assessed as personal property at 10 percent of their fair market value. After 1980, real estate, mobile homes and public service corporations were all assessed at 100% of their fair market values. During the study period the assessment procedures for personal property, machinery and tools and merchant's capital remained unchanged.

From 1975 to 1980 the tax rates on real and personal property, machinery and tools, merchant's capital and public service corporations were constant. Subsequent to the 1980 reassessment, taxes on real estate declined from \$2.00 per \$100 of value to \$.10 per \$100 of value. Taxes on personal property, machinery and tools and merchant's capital increased from \$2.00 per \$100 of value to \$3.00 per \$100 of value. Mobile homes were taxed as real property but categorized as personal property. (See Table 6)

INDEBTEDNESS

As of June 30, 1981, Clintwood's long-term municipal debt was estimated to be \$587,895. All of this debt has been incurred to finance improvements to the Town's water and sewer system with a major portion, \$532,895, incurred within the last 2 years to pay for the Town's distribution line from the John Flannagan reservoir.

As of June 30, 1981, the Town's short-term municipal debt was estimated to be approximately \$39,000.

RATIO OF BONDED INDEBTEDNESS TO ASSESSED VALUATION

Clintwood can not legally issue any bonds or other interest bearing obligations which, including existing indebtedness, exceed 10 percent of the assess valuation of that real estate property in the Town which is subject to taxation as determined by the proceeding tax assessment. This limitation does not apply to any short-term notes or to bonds used for the supply of water or other undertakings from which the Town may derive a revenue. As of June 30, 1981, the Town had \$55,000 of bonded indebtedness backed by the full faith and credit of the Town.

ASSESSED VALUE, TAX RATE 1975-1981, TOWN OF CLINTWOOD, VIRGINIA

BLE 6

FISCAL YEAR	ASSESSED VALUE	% OF FAIR MARKET VALUE	TAX RATE	TAX RATE 100%
<u>1975</u>				
Real Estate	\$ 640,350	10%	\$ 2.00	\$.20
Personal Property	140,820	10%	1.50	.15
Mobile Homes	-	-	-	-
Machinery and Tools	26,850	10%	1.50	.15
Merchant's Capital	101,430	10%	1.50	.15
Public Service Corporation	136,820	10%	2.00	.20
TOTAL	\$1,046,270			
<u>1976</u>				
Real Estate	\$ 609,890	10%	2.00	.20
Personal Property	201,480	10%	2.00	.20
Mobile Homes	-	-	-	-
Machinery & Tools	26,820	10%	2.00	.20
Merchant's Capital	107,730	10%	2.00	.20
Public Service Corporation	119,258	10%	2.00	.20
TOTAL	\$1,065,178			
<u>1977</u>				
Real Estate	\$ 639,680	10%	2.00	.20
Personal Property	158,289	10%	2.00	.20
Mobile Homes	-	-	-	-
Machinery & Tools	-	10%	2.00	.20
Merchant's Capital	63,110	10%	2.00	.20
Public Service Corporation	127,308	10%	2.00	.20
TOTAL	\$ 988,387			
<u>1978</u>				
Real Estate	\$ 644,510	10%	2.00	.20
Personal Property	205,770	10%	2.00	.20
Mobile Homes	-	-	-	-
Machinery & Tools	9,770	10%	2.00	.20
Merchant's Capital	175,650	10%	2.00	.20
Public Service Corporation	105,012	10%	2.00	.20
TOTAL	\$1,140,712			
<u>1979</u>				
Real Estate	\$ 652,500	10%	2.00	.20
Personal Property	167,450	10%	2.00	.20
Mobile Homes	-	-	-	-
Machinery & Tools	14,420	10%	2.00	.20
Merchant's Capital	125,704	10%	2.00	.20
Public Service Corporation	91,722	10%	2.00	.20
TOTAL	\$1,051,796			
<u>1980</u>				
Real Estate	\$20,184,850	100%	.10	.10
Personal Property	150,210	10%	3.00	.30
Mobile Homes	453,000	100%	.10	.10
Machinery & Tools	131,330	10%	3.00	.30
Merchant's Capital	97,662	10%	3.00	.30
Public Service Corporation	1,037,739	100%	.10	.10
TOTAL	\$22,054,791		2.00	2.00
<u>1981</u>				
Real Estate	\$20,116,850	100%	.10	.10
Personal Property	163,310	10%	3.00	.30
Mobile Homes	575,838	100%	.10	.10
Machinery & Tools	18,466	10%	3.00	.30
Merchant's Capital	100,608	10%	2.00	.20
Public Service Corporation ¹	1,162,268	100%	.10	.10
TOTAL	\$22,107,340		2.00	2.00

¹Not calculated as of 10/81, estimated by Balzer and Associates

Source: Dickenson County Treasurer's Office
Balzer and Associates

Epilogue to Chapter 8 Financial Analyses "Two Decades Later"

Today, in 1998, the Town of Clintwood, Virginia operates with an annual budget of more than one million dollars. Once the new Red Onion prison becomes operational, the town's combined operations, including general government operation and water and sewer utility services, will equal approximately 1.25 million dollars annually in total. The constituent parts are:

General Fund, approximately	\$ 500,000
Water Fund, ..	\$ 500,000
Sewer Fund, ..	\$ 250,000
<hr/>	
	\$ 1,250,000

The budget's growth to current levels from a total of less than one-half million dollars annually in 1980 may, at first blush, seem surprising. However, a review of circumstances surrounding the town's finances makes the budget's growth understandable.

Town of Clintwood financial records from the late 1970's reveal successive annual deficits indicating a state of virtual insolvency. In addition to starting from a deficit position, each of the eighteen years between 1980 and 1998 has been inflationary. Indeed, the federal Consumer Price Index (CPI), which measures changes in the costs of commodities, including labor, recorded a cumulative increase of nearly 100% during the eighteen year period ending in 1998.

In 1986 the Town of Clintwood also annexed approximately 300 new residents, expanding its service base by roughly 25%. As alluded to above, serving, the new Red Onion prison will also expand the town utility customer base.

Various circumstances and actions have enabled the Town of Clintwood to successfully respond to the financial challenges before it in the 1980's and 1990's. The real estate subject to town property taxation increased from an assessed value of \$20,116,850 in 1980 to a 1998 value of \$38,421,069. This helped produce a comparable increase in property revenues during the same time frame. The 1986 annexation, new construction and the effect of inflation generally, as reflected in updated county assessments, caused the increase.

While inflation pulls only certain line items on the revenue side of a municipal budget up with it, it pushes all the items on the expenditure side upward over time. For Clintwood to maintain the level of service funded in its general fund budget, new taxation strategies were employed. In April, 1992, a consumer utility tax payable by tenants and property owners alike with a moderate cap was implemented. In December, 1988, a prepared good and beverage tax, known as the meals tax, was installed at the rate of four percent (4%).

Public utilities are commonly operated as free-standing entities known as enterprise fund activities. Clintwood has applied the philosophy that its water and sewer utilities should not only be free-standing but also self-supporting. In the sewer fund this led to contracting with a private firm(PSG-Prof. Services Group) to operate and maintain its sewer treatment plant. Public

CHAPTER 6

ECONOMIC ANALYSIS

ECONOMIC ANALYSIS

An understanding of the structure and functioning of Clintwood's urban economy is fundamental to all land use planning analysis and policy statements contained within this document. The purpose of this analysis is to define, describe and examine the economic characteristics of Clintwood by reviewing pertinent economic activities, employment, employment trends and income statistics.

ECONOMIC ACTIVITIES:

Mining:

Coal mining is currently and historically the major industrial activity and source of income in the Clintwood-Dickenson County area. In July of 1980, 20 percent of the employed persons residing in the Town were directly affiliated with the coal industry. In March of 1979, 54 percent of the persons employed by firms operating in Dickenson County (including Clintwood) were working within the coal mining industry.

In the first quarter of 1981, a payroll of \$15,142 million was disbursed by 66 coal mining establishments operating in Dickenson County. This amount was 84 percent of the total 1981 first quarter payroll of \$18,075 million paid by all establishments licensed to operate in the County. By comparison, in 1979 the mining industry in Virginia constituted only 1.9 percent of the State's total payroll and only 1 percent of the State's total employment. (Note: Bituminous

coal mining comprises approximately 85 percent of Virginia's total mining activities.)

Dickenson County is one of 7 coal producing counties in southwestern Virginia. In 1979, the coal extracted from this area was valued at \$1.14 billion, sixth among the nation's coal producing states. The value of coal mined in Dickenson County in 1979 was approximately \$220 million.

The Federal Power Commission has designated 5 primary coal producing regions within the United States. In 1975, the Appalachia region, of which Dickenson County is a part, produced 49 percent of the coal purchased by the nation's utility companies. Because of increased production anticipated in the western part of the country, this percentage is projected to decrease to 34 percent by 1985. This decrease reflects a shifting share of the coal market and not a reduction in demand. Nationally, coal production, after sluggish growth from 1973 to 1978 has experienced dramatic increases in 1979, 1980 and 1981. The primary cause has been greatly increased purchases of coal by both domestic and foreign utility companies responding to the rapid price increase of oil and the difficulties encountered in constructing and operating nuclear power plants. During the past two years, domestic electric utilities have not only consumed much larger amounts of coal but have also built up large stockpiles. Virginia is in a very favorable position for supplying coal to the export market via the Hampton Roads port facilities.

Manufacturing:

Manufacturing employed less than 4 percent of Clintwood's residents in 1980. In March of 1979, manufacturing firms employed only 5.9 percent of the persons working within Dickenson County. The total first quarter payroll in 1981 for Dickenson County's manufacturing concerns was \$535,854. This amount was less than 3 percent of the total first quarter payroll disbursed by all commercial and industrial establishments operating in the County. Seven manufacturing establishments are currently located within Dickenson County. Of these, only 1 is located in Clintwood. According to the Division of Industrial Development, there were no announcements in 1979 or 1980 of any new or expanding manufacturing firms in either the County or the Town.

The primary manufacturing businesses in Dickenson County produce clothing and lumber. The average hourly wage for manufacturing employees in Dickenson County is \$3.93, considerably lower than either the State (\$5.58) or the national (\$6.69) average.

The gross state product, an estimate of the value of all goods and services produced in the state in 1 year, totalled \$267,381.5 million in 1980. Of this amount, manufacturing accounted for 21.6 percent, as opposed to mining which contributed only 1.3 percent. Manufacturing has

PAYROLL AND NUMBER OF ESTABLISHMENTS BY INDUSTRY: FIRST QUARTER, 1981
DICKENSON COUNTY AND STATE OF VIRGINIA

INDUSTRY ¹	QUARTERLY PAYROLL (\$1,000)		% OF QUARTERLY COUNTY PAYROLL	NUMBER OF ESTABLISHMENTS	
	DICKENSON COUNTY	STATE		DICKENSON COUNTY	STATE
Agriculture, Forestry & Fish	-	26,108	0	-	1,393
Mining & Quarrying	15,142	122,691	83.7	66	747
Construction	61	398,019	.3	15	13,835
Manufacturing	535	1,539,034	2.9	7	5,174
Transportation, Communication, Utilities	844	473,704	4.6	29	3,808
Trade	1,090	1,201,225	6.0	86	31,295
Finance, Insurance, Real Estate	74	352,803	.4	8	8,533
Services	327	1,141,826	1.8	40	30,997
TOTAL	18,075	5,255,414	100.0	251	95,782

¹Excludes government and railroad employees, self employed persons.

Source: Virginia Employment Commission

been and will continue to be vital to Virginia's economic balance. Therefore, it is important that manufacturing concerns be encouraged to locate within Dickenson County and Clintwood. Not only does manufacturing bolster the local economy by way of property and income taxes, purchases and payrolls, but it has one of the highest employment multipliers of any economic sector.

An employment multiplier occurs as a new or expanded industry injects income into the community that results in a cumulative (or multiplier effect on community income or employment that exceeds the initial input. The U. S. Chamber of Commerce has estimated that in rural areas, an increase of 68 nonmanufacturing jobs occurs for every increase of 100 factory workers. On an employment basis; therefore, the approximate multiplier effect for manufacturing in Clintwood is 1.68. Because of the Town's relative isolation, the effect may be even greater.

Trade and Service:

Retail and wholesale trade and service enterprises employed over 18 percent of Clintwood's residents in 1980. In March of 1979, trade and service activities employed 15.2 percent of the individuals working within Dickenson County. The total 1981 first quarter payroll for trade and service firms operating in Dickenson County was \$1,417,478, or 7.8 percent of the total first quarter payroll disbursed by all commercial enterprises in the County. Of the 277 trade and

service businesses operating in Dickenson County in 1981, approximately 95, or 34 percent are located in Clintwood.

Taxable sales (including motels, hotels, and selected other services but excluding automobiles, gasoline, and alcoholic beverages) in Dickenson County and Clintwood in 1979 were \$35 million, an increase of 3.6 percent from 1978. Taxable sales in Virginia in 1979 were \$17.8 billion, up 7.0 percent from 1978.

The chart on the following page, prepared from data published by the Virginia Department of Taxation, indicates that the growth rate of taxable sales in Dickenson County from 1971 to 1979 has been comparable to that of the State and the region. The Table demonstrates that the amount of taxable sales in

¹Note: the rate of inflation between 1978 and 1979 was 11.5 percent.

TAXABLE SALES FOR VIRGINIA CITIES AND COUNTIES: 1979

TOTAL SALES	TOTAL DOLLAR SALES - 1979 (\$000)	INDEX OF CHANGE (1971=100)								
		1971	1972	1973	1974	1975	1976	1977	1978	1979
STATE	\$17,751,254	100.0	111.5	126.2	146.2	151.0	165.9	185.8	208.8	223.6
DICKENSON COUNTY	35,260	100.0	109.0	119.6	156.1	186.2	205.1	218.6	231.3	239.8
WISE COUNTY	121,927	100.0	113.0	128.6	163.4	192.4	213.1	231.2	243.2	250.3
BUCHANAN COUNTY	90,003	100.0	104.0	111.7	141.0	177.8	197.8	209.4	224.7	239.5
RUSSELL COUNTY	50,263	100.0	111.7	115.0	135.2	166.2	184.7	214.2	228.6	234.8
TAZEWELL COUNTY	158,470	100.0	117.2	129.4	144.6	173.0	191.2	211.5	234.3	253.5
REGIONAL AVERAGE	91,184.6									

GAF STORE SALES VIRGINIA CITIES AND COUNTIES: 1979

TOTAL SALES	TOTAL DOLLAR SALES - 1979 (\$000)	INDEX OF CHANGE (1971=100)								
		1971	1972	1973	1974	1975	1976	1977	1978	1979
STATE	5,527,084	100.0	110.3	125.4	142.2	142.6	156.8	175.8	197.2	204.3
DICKENSON COUNTY	7,065	100.0	107.8	116.1	156.0	164.5	164.2	166.1	166.0	171.1
WISE COUNTY	25,403	100.0	127.7	159.6	193.1	182.1	197.7	212.7	221.4	217.6
BUCHANAN COUNTY	25,473	100.0	104.9	112.5	137.8	155.6	167.7	179.7	183.3	191.0
RUSSELL COUNTY	15,054	100.0	121.6	138.4	169.7	165.8	183.7	207.2	225.2	233.5
TAZEWELL COUNTY	38,384	100.0	131.9	135.5	149.1	171.4	183.4	195.9	205.1	228.7
REGIONAL AVERAGE	22,275.8									

Source: Virginia Department of Taxation

in 1979 however, was far below the regional average of \$91,184,600. Careful examination reveals that the most significant retail growth has paralleled increases in coal mining activity.

GAF sales (general merchandise, apparel, furniture and appliances) in Dickenson County and Clintwood in 1979 were \$7 million, an increase of 3.0 percent from 1978. However, the County's and Town's GAF sales in 1979 were substantially lower than GAF sales transacted in the neighboring Counties of Buchanan, Wise, Tazewell and Russell. GAF sales in Virginia advanced 3.6 percent from 1978 to 1979. The table on the preceding page documents these findings as well as the index of change for GAF sales in the State and the region.

Sales Tax Revenue:

Sales tax revenue is generally a reliable indicator of economic health. Patrons of businesses in Clintwood pay a sales tax of 4 percent for every \$1 spent. Of this 4 percent, 1 percent is returned from the State to the County for local option, 1 percent is allocated by the State to all local school districts according to student membership and 2 percent is retained by the State.

In Dickenson County yearly sales made during the calendar year ending December 31, 1979 as reflected by deposits of sales tax revenues totaled \$35,260,451. In 1980 this figure had increased 4.3 percent to \$36,763,180. The consultants estimate that of these amounts sales transacted in Clintwood accounted for \$11,988,553 and \$12,499,481 respectively. Based on these estimates, it is clear that Clintwood is the retail trade center of Dickenson County.

EMPLOYMENT

Employment analyses and forecasts serve two primary purposes: they provide information necessary for population studies which in turn are used for determining space needs for residential areas and community facilities, and they aid in estimating commercial and industrial land use requirements.

Note: The rate of inflation between 1978 and 1979 was 11.5 percent.

Current Employment

Employment in the Town of Clintwood totaled 469 workers in July of 1980. This represents 34.3 percent of the Town's 1980 total population. Of these 469 workers, 220, or 47 percent, are employed within the Town. An additional 157 workers commute to places of employment in Dickenson County. The remaining 92 persons work in Wise, Buchanan, Tazewell or Russell Counties or in the adjacent counties of Kentucky.

Future Employment:

There are 2 primary means of forecasting future employment: the analytical method and the short-cut method. The analytical method develops employment projections by analyzing probable future production and worker output data. In essence, future demand for a particular good or service is determined. The short-cut method chosen for this analysis is much simpler, utilizing one or more employment statistics directly.

Projection Methodology:

A simple step-down procedure was developed to derive categorical employment projections for the year 1990. This methodology is founded upon the principle that local employment trends are

a function of national trends and that by using a carefully conceived national forecast a reasonably accurate local estimate may be developed.

TOTAL EMPLOYMENT
TOWN OF CLINTWOOD, JULY, 1980

	1980	% OF TOTAL
<u>POPULATION</u>	1,369	
<u>EMPLOYMENT</u> ¹		
Manufacturing	18	3.8
Non-Manufacturing	451	96.1
Mining	96	20.5
Construction	11	2.3
Transportation, Communication & Public Utilities	17	3.6
Trade	60	12.8
Finance, Insurance & Real Estate	19	4.0
Services	25	5.3
Government	133	28.4
Agricultural	0	0
Other Non-Agricultural (including self-employed)	90	19.2
 TOTAL	 469	 100.0

¹Employment data based on place of residence not place of work.

Sources: Survey by Town of Clintwood
Balzer and Associates

Projections for the Town of Clintwood were computed by using the current employment by place of residence figures for the Town and employment projections, 19781990 prepared by the United States Bureau of Labor Statistics. The national forecasts were calculated using the most recent data pertaining to population, industry, occupational employment, productivity and consumer expenditures. In addition, the Bureau's projections were based on the following assumptions:

- * Inflation will decelerate to 5.2 percent annually during 1980-1990.
- * A stable, long-run unemployment rate close to 4.5 percent will be achieved by the mid-1980's.
- * Higher energy prices will not constrain growth in gross national products.
- * The institutional framework of the U. S. economy will not change radically
- * Current social, technological, and scientific trends will continue.
- * No major event such as widespread or long lasting energy shortages or war will significantly alter the industrial structure of the economy or alter the rate of economic growth.

A per annum percentage increase as determined for each employment category, 1978-1990, by the Bureau of Labor Statistics was applied to the August, 1980 estimated labor force components of the Town of Clintwood. The results are as follows:

EMPLOYMENT PROJECTIONS, TOWN OF CLINTWOOD

1980-1990

<u>INDUSTRIAL CATEGORY</u>	<u>1980 TOWN EMPLOYMENT</u> ¹	<u>PROJECTED PER ANNUM PERCENTAGE INCREASE</u>	<u>1990 TOWN PROJECTED EMPLOYMENT</u> ¹
Manufacturing	18	1.3	20
Coal Mining	96	1.7	112
Transportation, Communications, Utilities	17	.88	18
Trade	60	2.3	74
Services	25	4.4	36
Finance-Real Estate	19	2.8	24
Construction	11	1.4	13
Government	133	1.1	148
Other	90	2.0	108
TOTAL	469	2.0	553

¹ Employment figures denote place of residence not place of work.

Source: U. S. Department of Labor, Bureau of Labor Statistics
 Survey conducted by Town of Clintwood
 Balzer and Associates, Inc.

Manufacturing:

Population increases and rising incomes have increased demands for almost all types of goods, but improved methods of production have and will continue to limit employment growth.

Employment grew more slowly in manufacturing than in any other sector between 1965 and 1978. Between 1980 and 1990, however, employment in durable goods manufacturing is expected to increase substantially.

Coal Mining

As the nation's need for energy increases in the next decade, employment in the mining sector is expected to grow significantly.

Transportation - Communications - Public Utilities

Employment in the railroad and water transportation industries will continue to slowly decline. Other forms of transportation such as trucking and air transit will increase steadily.

The demand for communication equipment as well as electric power, gas utilities, water and sanitary services will increase as the population grows and more households and businesses are formed. Technological advances in the systems required to provide these services will moderately restrict future employment growth.

Trade:

Employment growth in the retail and wholesale industries will parallel increases in population and income. Retail employment is projected to increase much faster than wholesale employment.

Services:

Service employment which includes hotels, barber shops, auto repair shops, business services, hospitals and nonprofit organizations is projected to increase dramatically between 1980 and 1990. Employment opportunities in health care are expected to grow rapidly due to population growth - especially the elderly and rising incomes that increase people's ability to pay for medical care. Business services, including accounting, data processing and maintenance are also expected to increase.

Finance - Real Estate:

Employment in this sector is expected to rise in order to meet increasing consumer demand for credit and other financial services.

Construction:

The Department of Labor projects that during the early 1980's, the demand for new housing will remain high because the number of households is expected to increase. Expansion of businesses and maintenance of existing buildings will also require more construction employment.

Government

It is expected that new government programs will not be enacted because of the public's desire to limit government growth. However, school employment will rise moderately in response to the immigration of school age children accompanying adults employed by the coal mining industry and its service affiliates

INCOME

Personal income is made up of wage and salary disbursements, proprietors' income, rental income of persons, dividends, personal interest income, and transfer payments. Although most personal income is in a monetary form, there are several exceptions such as (1) wages and salaries paid in kind; (2) the net rental value of owner-occupied houses; (3) the net value of food and fuel produced and consumed on farms; and (4) imputed interest received by persons from financial intermediaries. Capital gains are not included in personal income principally because they are not attributable to current economic activity. Personal income is measured before deduction of income and other personal taxes, but after deduction of Social Security taxes, government retirement, and other social insurance programs.

Total Personal Income by Place of Residence

The total personal income of the residents of the State increased \$18,418 billion (70 percent) between 1974 and 1979. The total personal income of those persons residing in Dickenson County increased 87 percent for the same time period. The estimated amounts of total personal income for the residents of Clintwood during the period 1974-1979 are presented on the following page:

"Personal Income Estimates for Virginia Counties and Cities," 1973-1978, p.7. Tayloe Murphy Institute

TOTAL PERSONAL INCOME BY PLACE OF RESIDENCE, 1974-1979 (millions of dollars)

	1974	1975	1976	1977	1978	1979	# CHANGE	% CHANGE
State of Virginia	\$26,212	\$28,738	\$31,997	\$35,431	\$39,687	\$44,630	\$18,818	70%
Dickenson County	68.0	81.4	86.4	94.7	98.1	127.8	59.7	87% Clintwood
(estimated)	5.1	6.1	6.1	6.5	6.6	8.5	3.4	67% Source: Regional Economics

Informational System Bureau of Economics

Per Capita Personal Income

The per capita personal income of Dickenson County residents increased between 1969 and 1979. In 1969, the County's per capita personal income was \$1,870 or 55% of the State average

of \$3,400. By 1979 the County's per capita personal income had risen to \$6,340 or 73% of the State average, ranking the County 95 out of 136 Virginia localities. It is assumed that the per capita personal income of Clintwood's residents is equivalent to that of the County.

PER CAPITA INCOME 1974-1979

1974-1979

	1974	1975	1976	1977	1978	1979	# CHANGE	% CHANGE
State of Virginia	\$5,339	\$5,770	\$6,333	\$6,955	\$7,666	\$8,588	\$3,249	61%
Dickenson County	3,827	4,531	4,538	4,829	4,941	6,340	2,513	66%

Source: Regional Economics Information System

Bureau of Economics

Low and Moderate Income

Low- and moderate-income persons are defined as those whose annual income is less than \$12,004 per year, which is 80% of the Statewide non-metro median income, as defined by the United States Department of Housing and Urban Development in October 1980.

In July of 1980, there were 226 low- and moderate-income households in the Town of Clintwood. These households constituted 45.1 percent of all the households in the Town. Approximately 533 persons resided in these households.

In March of 1981, there were 69 low- and moderate-income households in the peripheral planning areas. These households comprise 50 percent of all the households located in these areas.

CHAPTER 7

POPULATION ANALYSIS

POPULATION ANALYSIS

Analysis of current and future population size is the foundation for almost all major planning decisions. Current and future demands for community services and facilities as well as land for residential, commercial and industrial purposes are directly affected by the size, composition, and spatial distribution of the population. Population size indicates the basic amounts of land required for the various types of uses. When a time element is introduced and future population trends are projected) these trends become the basis for calculating future community service facility and spatial requirements. Population composition encompasses age, household size and income levels, all of which are indices of the types and extent of services and facilities as well as policies required by the community. An examination of population distribution reveals the most functional location for future land uses, community services and facilities, and public utilities. Therefore, the population analysis of the Town of Clintwood is necessary as a means of defining the scale, location and temporal considerations of future public and private development within the Town and its environs.

CURRENT POPULATION SIZE:

Between 1940 and 1980, the Town of Clintwood experienced an increase in population of 263 persons, a net gain of 23.8 percent. The population of the Town in 1940 was 1,106. The 1980 final population count as prepared by the Bureau of the Census indicates that 1,369 persons reside in the Town. A 1981 survey conducted by the Consultants reveals that an additional 481

persons live within the Town's peripheral planning area. The current total population of Clintwood and its planning area is 1,850.

POPULATION GROWTH:

The Town of Clintwood's total population has increased on the average of .6 percent per annum since 1940. However, as may be seen in Figure I, this growth has not been continuous. The Town's population increased 27 percent from 1940 to 1960. Between 1960 and 1970 the Town experienced a 6 percent decline in population. Since the 1970 census the Town's population increased from 1,320 persons to the current total of 1,369 persons, a gain of 3.7 percent or a growth rate of .4 percent per annum.

By seeing aerial photographs and the standard of 3.0 persons per household, the Consultants were able to establish that 336 persons resided in the Town's peripheral planning area in 1970. Between 1970 and 1980, this area experienced a 43 percent increase in population or a per annum growth rate of 4.3 percent.

In summary, the population of the Town of Clintwood and its peripheral planning area grew from 1,656 person in 1970 to 1,850 person in 1980, an increase of 12 percent.

The Dickenson County Comprehensive Plan and the 1990 Report of the U.S. Census Bureau show population trends for the County, including the Town of Clintwood, as follows:

POPULATION TRENDS				
1950-1990, Clintwood, Virginia				
YEAR	TOWN POPULATION	NUMBER CHANGE	% CHANGE	
1950	1,366			
1960	1,400	34	2.4	
1970	1,320	-80	-5.7	
1980	1,369	49	3.7	
1990	1,542	173	12.6	

Source: Virginia Statistical Abstract, 1996-97 Edition, Weldon Cooper Center for Public Service.

POPULATION TRENDS				
1950-1990 Dickenson County, Virginia				
YEAR	COUNTY POPULATION	NUMBER CHANGE	% CHANGE	
1950	23,393			
1960	20,211	-3,182	-13.60%	
1970	16,077	-4,134	-20.40%	
1980	19,806	3,729	23.20%	
1990	17,620			

Source: Virginia Statistical Abstract, 1996-97 Edition, Weldon Cooper Center for Public Service.

LOCATION	1980	1990	% CHANGE	
			1980-1990	% ANNUAL GROWTH
Clintwood Town	1,369	1,542	12.6	1.3
Dickenson County	19,806	17,620	-11.0	-1.1
Scott County	25,068	23,204	-7.4	-0.7
Buchanan County	37,989	31,333	-17.5	-1.8
Tazewell County	50,511	45,960	-9.0	-0.9
Russell County	31,761	28,667	-9.7	-1.0
Washington County	46,487	45,887	-1.3	-0.1
Lee County	25,956	24,496	-5.6	-0.6
Wise County	42,343	39,573	-6.5	-0.7
Norton City	4,757	4,247	-10.7	-1
Wise Town	3,891	3,894	0.08	0.008
Bristol City	19,042	18,426	-3.2	-0.3

Source: Virginia Statistical Abstract, 1996-97 Edition, Weldon Cooper Center for Public Service.

BIRTH AND DEATH RATES PER 1,000 TOTAL POPULATION

Dickenson County		1990	
Births	Deaths	No.	Rate
185	10.8	179	10.5

Source: Virginia Statistical Abstract, 1996-97 Edition, Weldon Cooper Center for Public Service.

CURRENT AGE GROUP POPULATION

Town of Clintwood

<u>AGE GROUP</u>	<u>NUMBER</u>	<u>PERCENT</u>
0-5	73	4.7%
5-14	175	11.3%
15-24	208	13.5%
25-34	191	12.4%
35-44	244	15.8%
45-54	177	11.5%
55-64	178	11.6%
Over 65	296	19.2%
TOTAL	1,542	100%

AGE GROUP	NUMBER	1980	NUMBER	1990	CHANGE	NUMBER	PERCENT
		PERCENT		PERCENT			
0-18	363	26.5%	340	22.0%	-23	-6.3%	
19-64	817	59.7%	906	58.8%	89	10.9%	
Over 65	189	13.8%	296	19.2%	107	56.7%	
TOTAL	1,369	100.0%	1,542	100%	173	61.3	

Lickenson County

AGE GROUP	NUMBER	PERCENT
0-5	1,037	5.8%
5-14	2,827	16.0%
15-24	2,567	15.0%
25-34	2,680	15.2%
35-44	2,668	15.1%
45-54	2,030	11.5%
55-64	1,664	9.4%
Over 65	2,147	12.0%
TOTAL	17,620	100%

Source: 1990 Census

RACE

LOCATION	TOTAL POPULATION		TOTAL MINORITY POPULATION		% MINORITY	
	1980	1990	1980	1990	1980	1990
Clintwood	1,369	1,542	10	7	0.73	0.45
Dickenson County	19,806	17,620	115	99	0.58	0.56
Source: 1990 Census						

Source: 1990 Census

HOUSEHOLD SIZE

LOCATION	POPULATION		OCCUPIED HOUSING UNITS		PERSONS/UNIT	
	1980	1990	1980	1990	1980	1990
Clintwood	1,369	1,542	573	672	2.38	2.29
Johnson County	19,806	17,620	6,290	6,457	3.14	2.72
Source: 1990 Census						

POPULATION DENSITY			
<u>LOCATION</u>	<u>POPULATION</u>	<u>AREA IN SQUARE MILES</u>	<u>PERSONS PER SQUARE MILE</u>
Clintwood Town	1,542	1.9	812
Haysi Town	222	0.9	246
Norton City	4,247	7.3	582
Pound Town	995	2.6	383
Wise Town	3,193	3.0	1,064

Source: Virginia Statistical Abstract, 1996-97 Edition, Weldon Cooper Center for Public Service.

PROJECTED POPULATION			
<u>YEAR</u>	<u>DICKENSON COUNTY</u>		
1995	16,994		
2000	16,397		
2005	16,050		
2010	15,702		

<u>YEAR</u>	<u>Clintwood</u>	
1991	1,530	
1992	1,577	
1993	1,580	
1994	1,583	

Source: Virginia Statistical Abstract, 1996-97 Edition, Weldon Cooper Center for Public Service.

INDUSTRY							
Town of Clintwood							
Employed Persons 16 Years & Over							
Agriculture, Forestry & Fisheries	0						
Mining	87						
Construction	30						
Manufacturing, Nondurable Goods	27						
Manufacturing, Durable Goods	4						
Transportation	12						
Communications & Other Public Utilities	13						
Wholesale Trade	8						
Retail Trade	72						
Finance, Insurance, & Real Estate	29						
Business & Repair Services	6						
Personal Services	17						
Entertainment & Recreation Services	7						
Professional & Related Services:							
Health Services	46						
Educational Service	102						
Other Professional & Related Services	39						
Public Administration	53						
Source: 1990 Census							

OCCUPATION

Town of Clintwood

Managerial & Professional Specialty Occupations:	
Executive, Administrative, & Managerial Occupations	63
Professional Specialty Occupations	115
Technical, Sales, & Administrative Support Occupations:	
Technicians & Related Support Occupations	12
Sales Occupations	57
Administrative Support Occupations, Included Clerical	77
Service Occupations:	
Private Household Occupations	2
Protective Service Occupations	17
Service Occupations, Except Protective & Household	61
Farming, Forestry, & Fishing Occupations	5
Precision Production, Craft, & Repair Occupations	76
Operating, Fabricating & Laborers:	
Machine Operators, Assemblers, & Inspectors	24
Transportation & Material Moving Occupations	37
Handlers, Equipment Cleaners, Helpers, & Laborers	14

Source: 1990 Census

PER CAPITA PERSONAL INCOME

	1993	1992	1991	1990
Virginia	\$21,653	\$20,683	\$20,046	\$19,701
Dickenson County	\$14,321	\$13,788	\$13,435	\$13,530
(c) Virginia Statistical Abstract, 1996-97 Edition, Walton Cooper Center for Public Services				

PROJECTED MEDIAN FAMILY INCOME					
	1996	1995	1994	1993	1992
Virginia	\$47,549	\$46,096	\$44,643	\$43,919	\$42,258
Dickenson County	\$21,643	\$21,456	\$21,289	\$24,929	\$24,221
Source: Virginia Statistical Abstract, 1996-97 Edition, Weldon Cooper Center for Public Service.					
PROJECTED MEDIAN HOUSEHOLD INCOME					
	1996	1995	1994	1993	1992
Virginia	\$41,470	\$40,203	\$38,936	\$37,202	\$35,839
Dickenson County	\$18,085	\$17,928	\$17,789	\$21,514	\$20,919
Source: Virginia Statistical Abstract, 1996-97 Edition, Weldon Cooper Center for Public Service.					

CHAPTER 8

FINANCIAL ANALYSIS

FINANCIAL ANALYSIS

The purpose of this study is to determine the relative financial capability of the Town of Clintwood to undertake a program of capital improvements to support the developmental growth in the Town as envisioned by the future land use element of this document.

The analysis includes an evaluation and comparison of the past revenues and expenditures, from fiscal years 1972 through 1981, as well as a review of the Town's assessable basis and outstanding bonded indebtedness for fiscal year 1981.

GENERAL OPERATING FUND

General Operating Revenues

As stated in the municipal audits 1972-1980, general operating revenues increased every year. From a level of \$152,552 in 1972-74, general operating revenues rose to \$228,323 in 1978-1980. The budgeted revenues in 1980-82 were estimated to be \$307,642. This budgeted amount represents a significant increase in revenues, not mere compensation for inflation. (Note: To account for inflation, adjust values using constant dollars - Appendix C.; Some of the major sources of revenue are discussed as follows: (Also see Table 1)

* Property Taxes increased from a total of \$37,796 in 1972-74 to \$41,453 in 1978-80. This is

an increase of \$3,657 during the period and represents an overall increase of 9.6 percent or 1.2 percent per annum. The estimated property tax revenue for 1980-82 is \$47,000.

* Local Sales Tax increased \$13,256 from 1972-74 to 1978-80. An overall increase of 103 percent or 12.9 percent per year. (Note: Local sales tax is disbursed by Dickenson County to the Town on the basis of school children, not sales volume.) The estimated local sales tax revenue for 1980-82 is \$24,500.

* Refuse removal fees received increased by 81 percent from 1972-74 to 1978-80 or 10 percent per year.

General Operating Expenditures:

As stated in the municipal audits 1972-1980, general operating expenditures have increased from \$108,161 in 1972-74 to \$294,718 in 1978-80. This rise of \$186,557 represents an average annual increase of almost 22 percent per year. The average inflation rate during the same period was 8.3 percent. The major expenditures are briefly discussed below. (Also see Table 2.)

* Insurance costs have increased dramatically since 1972. Hospital, automobile and workman's compensation insurance have increased from a combined amount in 1972-74 of \$6,624 to \$36,325 in 1978-80. This represents a rise of \$29,701 or a percentage increase of 448 percent.

* Fuel and power costs have also increased significantly during the study period.

* Police and Fire Departments combined increased from \$36,358 in 1972-74 to \$70,709 in 1978-80. This is an overall increase of 94 percent or almost 12 percent per year. The budgeted amount for 1980-82 is \$80,138.

* Refuse collection has increased more than \$15,400 between 1972 and 1980.

This is an overall increase of 67 percent or 8.4 percent per year.

Comparison of Past General Operating Revenues and Expenditures

A comparison of the general operating revenues and expenditures for the period 1972 to 1980 indicates that revenues have increased an average of 6.2 percent per year while expenditures have increased an average of almost 22 percent per year. Table 3 shows that in 1978-80 general operating expenditures exceeded revenues by more than \$66,000.

An examination of the municipal audits 1972-1980 reveals that the Town has maintained financial equilibrium only by way of short term bank loans and a modest amount of cash in bank savings.

UTILITY FUND

The Town of Clintwood maintains a separate water and sewer department budget. User charges (as opposed to tax revenues or licensing fees) for water and sewer services are imposed to pay

operational expenses and to retire bonds that financed previously constructed facilities.

Tables 4 and 5 indicate that during the period 1972-1980, water department expenditures exceeded revenues by an average of \$7,078 per year. Sewer department expenditures surpassed revenues by an average of \$3,185 per annum.

TABLE 1

TOWN OF CLINTWOOD GENERAL REVENUE BY SOURCE, 1972-1982

<u>REGULAR</u>	<u>1972-1974</u>	<u>1974-1976</u>	<u>1976-1978</u>	<u>1978-1980</u>	<u>BUDGETED 1981</u>	<u>BUDGETED 1982</u>
Parking Meters	\$ 10,495.50	\$ 10,532.00	\$ 10,501.59	\$ 7,062.00	\$ 5,000.00	\$ 5,000.00
Traffic Violations	619.03	794.78	1,934.34	333.50	450.00	1,000.00
Garbage Fees	20,238.50	25,009.25	15,374.50	36,732.00	18,000.00	27,500.00
Merchants Licenses	4,372.50	4,917.50	6,055.00	5,520.50	3,000.00	3,000.00
Privilege & Professional Liceses	6,937.66	5,895.38	3,990.00	5,438.00	2,600.00	1,000.00
Building Permits	50.00	-	-	-	-	1,000.00
District Court Fines	9,031.75	9,180.75	3,950.77	3,848.69	3,000.00	3,000.00
Amusement Licenses	1,157.00	1,241.00	1,450.00	835.00	300.00	800.00
A.B.C. Funds	9,594.00	10,245.00	10,400.36	14,744.60	5,500.00	5,500.00
Property Tax	37,796.38	40,959.68	46,742.93	41,452.76	22,000.00	25,000.00
Auto Tags	12,015.00	12,850.00	8,474.50	13,690.00	7,000.00	7,000.00
Bank Stock Tax	19,876.78	38,398.06	43,322.36	61,974.14	30,500.00	33,000.00
Utilities Tax	1,128.25	1,791.78	5,028.36	6,101.90	3,000.00	3,500.00
Sales Tax	12,787.48	9,365.23	16,775.06	26,042.95	11,000.00	13,500.00
Trailer Sales	-	-	2,624.69	1,398.74	500.00	1,500.00
Trailer Park Licenses	-	-	780.00	1,095.00	500.00	1,200.00
Miscellaneous	870.42	652.12	1,744.46	790.59	1,050.00	500.00
TOTAL	\$146,970.25	\$171,832.53	\$179,148.92	\$227,060.37	\$113,400.00	\$133,000.00
OTHERS						
Grants	-	-	-	-	\$ 14,669.88	\$ 11,253.00
Reimbursements (Revenue Sharing)	-	-	-	-	16,000.00	18,000.00
Miscellaneous	-	-	3,930.85	1,262.71	-	1,320.00
Loan Payment	2,581.27	-	-	-	-	-
Sale of Equipment	-	-	2,081.50	-	-	-
Sale of Land	-	3,000.00	-	-	-	-
Bank Loan	-	-	-	-	-	-
Board of Supervisors	3,000.00	-	-	-	-	-
Cumberland Plateau	-	-	-	-	-	-
TOTAL	\$ 5,581.27	\$ 3,000.00	\$ 6,012.35	\$ 1,262.71	\$ 30,669.88	\$ 30,573.00
TOTAL RECEIPTS	\$152,551.52	\$174,832.53	\$185,161.27	\$228,323.08	\$144,069.88	\$163,573.00

Sources: Municipal Audits, Town of Clintwood

Adopted General Fund Budget, Town of Clintwood, 1981 & 1982

TABLE 2

TOWN OF CLINTWOOD GENERAL GOVERNMENTAL EXPENDITURES BY FUNCTION, 1972-1982

	<u>1972-1974</u>	<u>1974-1976</u>	<u>1976-1978</u>	<u>1978-1980</u>	<u>BUDGETED</u> <u>1981</u>	<u>BUDGETED</u> <u>1982</u>
<u>POLICE DEPARTMENT</u>						
SALARIES	\$ 25,374.91	\$ 38,851.22	\$ 42,490.44	\$ 49,168.60	\$ 23,984.24	\$ 33,654.48
POLICE EXPENSES	7,915.76	14,082.76	11,661.36	16,549.94	8,300.00	8,700.00
TOTAL	\$ 33,290.67	\$ 52,933.98	\$ 54,151.80	\$ 65,718.54	\$ 32,284.24	\$ 42,354.48
<u>REBAGE COLLECTION</u>						
SALARIES	\$ 16,709.43	\$ 20,676.22	\$ 20,358.17	\$ 27,559.36	\$ 15,536.40	\$ 16,696.26
TRUCK EXPENSES	6,160.32	9,659.53	6,894.25	10,738.88	8,000.00	8,000.00
TOTAL	\$ 22,869.75	\$ 30,335.75	\$ 27,252.42	\$ 38,298.24	\$ 23,536.40	\$ 24,696.26
<u>RE DEPARTMENT</u>						
GENERAL EXPENSES	\$ 2,516.51	\$ 1,329.30	\$ 4,466.61	\$ 3,242.91	\$ 800.00	\$ 800.00
TRUCK EXPENSES	550.28	1,483.15	2,635.89	1,747.56	2,200.00	1,700.00
TOTAL	\$ 3,066.79	\$ 2,812.45	\$ 7,102.50	\$ 4,990.47	\$ 3,000.00	\$ 2,500.00
<u>WORKING METER COSTS</u>	\$ 610.13	\$ 59.70	\$ 742.88	\$ 106.11	\$ -	\$ 500.00
<u>TO STICKER COSTS</u>	\$ 369.60	\$ 193.05	\$ 419.25	\$ 590.30	\$ 300.00	\$ 350.00
<u>WEN HALL ADMINISTRATION</u>						
SALARIES	\$ 5,090.15	\$ 7,083.54	\$ 8,469.93	\$ 18,219.52	\$ 16,698.84	\$ 13,744.07
SUPPLIES & POSTAGE	752.73	1,731.35	2,640.19	2,435.67	900.00	1,000.00
TELEPHONE	304.42	395.57	1,869.43	2,680.53	1,100.00	2,000.00
AND POWER	711.77	636.63	1,506.35	2,430.18	900.00	2,100.00
TOTAL	\$ 6,859.07	\$ 9,847.09	\$ 14,485.90	\$ 25,765.90	\$ 19,598.84	\$ 18,844.07
<u>YROLL COSTS</u>						
TAXES	\$ 3,755.04	\$ 5,420.23	\$ 4,069.83	\$ 7,900.65	\$ 5,000.00	\$ 5,000.00
HOSPITAL INSURANCE	2,066.39	3,840.06	3,639.36	5,843.35	4,417.00	3,500.00
TOTAL	\$ 5,821.43	\$ 9,260.29	\$ 7,709.19	\$ 13,744.00	\$ 9,417.00	\$ 8,500.00
<u>REET MAINTENANCE</u>	1,640.58	22,701.37	19,147.82	26,976.95	26,671.40	20,392.77
REET CLEANING	9,377.99	19,310.48	18,295.47	23,689.79	-	-
PAIRS & SUPPLIES	870.42	1,449.11	2,039.37	1,854.98	600.00	1,500.00
WER	8,421.98	9,545.48	14,926.31	14,149.70	-	-
TORNEY FEES	425.00	1,504.83	2,982.59	2,331.57	1,200.00	1,500.00
COUNTING FEES	-	-	4,225.56	6,823.05	3,201.00	2,800.00
SURANCE	4,558.30	7,072.00	10,957.40	30,482.56	18,200.00	10,425.00
LECTION EXPENSES	1,193.50	890.22	1,388.05	1,175.50	-	2,500.00
UNCILMAN'S EXPENSES	5,625.73	8,579.22	9,948.98	11,237.18	500.00	500.00
X COLLECTION EXPENSES	300.00	-	1,050.00	900.00	500.00	500.00
VEL	200.00	75.00	-	643.54	500.00	250.00
TEREST ON LOANS	343.70	-	-	-	-	-
IRVEYING	-	480.00	485.00	10.00	-	200.00
SCELLANEOUS	2,315.95	1,937.28	12,189.23	11,471.51	4,500.00	2,000.00
TER DEPARTMENT	-	-	-	13,758.50	-	-
CONTRIBUTION	-	-	-	-	1,000.00	1,000.00
VERTISING	-	-	-	-	-	-
W BUILDING EXPENSES	-	-	-	-	-	2,000.00
YMENT ON LOANS	-	-	-	-	-	15,000.00
TAL EXPENSES	\$108,160.59	\$178,987.30	\$209,499.72	\$294,718.39	\$145,008.88	\$158,312.58

Municipal Audits, Town of Clintwood
Adopted General Fund Budget, Town of Clintwood, 1981 & 1982

TABLE 3

TOWN OF CLINTWOOD - COMPARISON OF TOTAL RECEIPTS AND TOTAL EXPENDITURESGENERAL OPERATING FUND 1972-1982

<u>FISCAL YEARS</u>	<u>1972-1974</u>	<u>1974-1976</u>	<u>1976-1978</u>	<u>1978-1980</u>	<u>BUDGETED 1981</u>	<u>BUDGETED 1982</u>
TOTAL RECEIPTS	\$152,551.52	\$174,832.53	\$185,161.27	\$228,323.08	\$144,069.88	\$163,573.00
TOTAL EXPENDITURES	108,169.59	178,987.30	209,499.72	294,718.39	145,008.88	158,312.58
DIFFERENCE	44,390.93	(4,154.77)	(24,337.73)	(66,395.31)	(939.00)	5,260.42
CUMULATIVE DIFFERENCE	44,390.93	40,236.16	15,898.43	(50,496.08)	(51,435.88)	(46,175.46)

Source: Municipal Audits, Town of Clintwood
 Adopted General Fund Budgets, Town of Clintwood, 1981 and 1982

TABLE 4

TOWN OF CLINTWOOD

WATER DEPARTMENT COMPARATIVE STATEMENT OF RECEIPTS AND DISBURSEMENTS

	<u>4 YEARS ENDED JUNE 30, 1980</u>				<u>BUDGETED</u>	<u>BUDGETED</u>
	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
<u>RECEIPTS</u>						
Water	\$100,817	\$119,599	\$126,499	\$125,536		
Hock-Ups	4,280	6,375	8,505	2,995		
Interest			22	138		
Disaster Flood Relief	<u>2,696</u>					
<u>TOTAL RECEIPTS</u>	<u>\$107,793</u>	<u>\$125,974</u>	<u>\$135,026</u>	<u>\$128,569</u>	<u>\$132,980</u>	<u>\$216,000</u>
<u>EXPENDITURES</u>						
Office Salaries	\$ 3,340	\$ 4,129	\$ 7,071	\$ 12,865		
Gross Payroll	43,305	44,721	50,470	55,669		
Employee Taxes and Fringe Benefits	4,233	4,141	5,133	8,927		
Workmens Compensation	1,055	1,205	1,584	1,915		
Bond Interest	19,000	30,072	18,807	16,885		
Bond Retirement		2,262	3,537	3,719		
Professional Fees		1,454	2,290	2,508		
Permits & Licenses	114	438	375	85		
Office Supplies	983	1,769	1,589	1,883		
Water Supplies	9,860	12,512	20,871	20,460		
Electricity	10,049	11,524	10,883	13,599		
Telephone	803	646	557	699		
Chemicals	2,924	3,352	3,984	1,634		
Pipe				10,000		
Gas & Oil - Truck	2,637	3,093	1,840	3,290		
Repairs	1,847	4,453	4,242	5,091		
Meters	1,713	2,477	1,194	729		
Pumps	5,544	1,100	4,428	1,216		
Equipment Rental	235	50	690	8,472		
Contract Services				5,029		
Stone	942	786	301	1,261		
Water Purchase	205	495	420	589		
Position Bonds				425		
Miscellaneous	410	168	1,154	810		
Cash Difference				4,111		
Drilling Expense		<u>1,393</u>				
<u>TOTAL EXPENDITURES</u>	<u>\$109,099</u>	<u>\$132,351</u>	<u>\$141,520</u>	<u>\$181,872</u>	<u>\$142,795</u>	<u>\$208,379</u>
<u>EXCESS OF RECEIPTS OVER DISBURSEMENTS</u>	<u>\$ (3,306)</u>	<u>\$ (6,377)</u>	<u>\$ (6,494)</u>	<u>\$ (53,203)</u>	<u>\$ (9,815)</u>	<u>\$ 7,621</u>

Source: Municipal Audits, Town of Clintwood
 Adopted Budget, Town of Clintwood, 1981 and 1982
 Water Fund

TABLE 5

TOWN OF CLINTWOOD

SEWER DEPARTMENT COMPARATIVE STATEMENT OF RECEIPTS AND DISBURSEMENTS

	<u>4 YEARS ENDED JUNE 30, 1980</u>				<u>BUDGETED</u>	<u>BUDGETED</u>
	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
<u>RECEIPTS</u>						
Sewer Receipts	\$43,991	\$44,698	\$45,753	\$50,132		
Hook-Ups	200	380	465	250		
Interest and Other Income	951	220	231	110		
<u>TOTAL RECEIPTS</u>	<u>\$46,142</u>	<u>\$45,298</u>	<u>\$46,449</u>	<u>\$50,492</u>	<u>\$46,400</u>	<u>\$84,000</u>
<u>EXPENDITURES</u>						
Office Salaries	\$ 2,038	\$ 4,220	\$ 2,648	\$ 2,376		
Gross Payroll	10,701	11,208	11,427	24,018		
Payroll Taxes & Fringe Benefits	1,002	802	1,815	3,601		
Bond Interest	4,688	4,313	3,971	3,503		
Bond Retirement	10,000	10,000	10,000	15,000		
Bank Service Fee	68	135	32	34		
Professional Fees		1,454	1,309	1,301		
Office Supplies	264	370	94	444		
Sewer Supplies	2,018	3,070	3,017	1,436		
Licenses - Permits	10	22	15	10		
Electricity	2,117	2,032	1,915	1,646		
Telephone		46		226		
Chemicals	12,755	9,795	2,593	4,574		
Gas & Oil	522	445	2	773		
Repairs	909	417	336	1,140		
Equipment Rental	150	1,198	1,000	950		
Cleaning Sewer Lines		817	495	228		
Miscellaneous	96	17	39	836		
Cash Difference				<u>12,356</u>		
<u>TOTAL EXPENDITURES</u>	<u>\$47,338</u>	<u>\$50,361</u>	<u>\$40,700</u>	<u>\$74,462</u>	<u>\$60,748</u>	<u>\$82,526</u>
<u>EXCESS OF RECEIPTS OVER DISBURSEMENTS</u>	<u>\$(2,196)</u>	<u>\$(5,063)</u>	<u>\$ 5,741</u>	<u>\$(23,960)</u>	<u>\$(14,348)</u>	<u>\$ 1,474</u>

Source: Municipal Audits, Town of Clintwood
 Adopted Sewer Fund Budget, 1981 and 1982

ASSESSED VALUATION:

The assessed valuation of the Town of Clintwood has increased from \$1,046,270 in 1975 to \$22,107,340 in 1981. Prior to 1980, all real estate and public service corporations were assessed at 10 percent of their fair market values. Mobile homes were assessed as personal property at 10 percent of their fair market value. After 1980, real estate, mobile homes and public service corporations were all assessed at 100% of their fair market values. During the study period the assessment procedures for personal property, machinery and tools and merchant's capital remained unchanged.

From 1975 to 1980 the tax rates on real and personal property, machinery and tools, merchant's capital and public service corporations were constant. Subsequent to the 1980 reassessment, taxes on real estate declined from \$2.00 per \$100 of value to \$.10 per \$100 of value. Taxes on personal property, machinery and tools and merchant's capital increased from \$2.00 per \$100 of value to \$3.00 per \$100 of value. Mobile homes were taxed as real property but categorized as personal property. (See Table 6)

INDEBTEDNESS

As of June 30, 1981, Clintwood's long-term municipal debt was estimated to be \$587,895. All of this debt has been incurred to finance improvements to the Town's water and sewer system with a major portion, \$532,895, incurred within the last 2 years to pay for the Town's distribution line from the John Flannagan reservoir.

As of June 30, 1981, the Town's short-term municipal debt was estimated to be approximately \$39,000.

RATIO OF BONDED INDEBTEDNESS TO ASSESSED VALUATION

Clintwood can not legally issue any bonds or other interest bearing obligations which, including existing indebtedness, exceed 10 percent of the assess valuation of that real estate property in the Town which is subject to taxation as determined by the proceeding tax assessment. This limitation does not apply to any short-term notes or to bonds used for the supply of water or other undertakings from which the Town may derive a revenue. As of June 30, 1981, the Town had \$55,000 of bonded indebtedness backed by the full faith and credit of the Town.

ASSESSED VALUE, TAX RATE 1975-1981, TOWN OF CLINTWOOD, VIRGINIA

BLE 6

FISCAL YEAR	ASSESSED VALUE	% OF FAIR MARKET VALUE	TAX RATE	TAX RATE 100%
<u>1975</u>				
Real Estate	\$ 640,350	10%	\$ 2.00	\$.20
Personal Property	140,820	10%	1.50	.15
Mobile Homes	-	-	-	-
Machinery and Tools	26,850	10%	1.50	.15
Merchant's Capital	101,430	10%	1.50	.15
Public Service Corporation	136,820	10%	2.00	.20
TOTAL	<u>\$1,046,270</u>			
<u>1976</u>				
Real Estate	\$ 609,890	10%	2.00	.20
Personal Property	201,480	10%	2.00	.20
Mobile Homes	-	-	-	-
Machinery & Tools	26,820	10%	2.00	.20
Merchant's Capital	107,730	10%	2.00	.20
Public Service Corporation	119,258	10%	2.00	.20
TOTAL	<u>\$1,065,178</u>			
<u>1977</u>				
Real Estate	\$ 639,680	10%	2.00	.20
Personal Property	158,289	10%	2.00	.20
Mobile Homes	-	-	-	-
Machinery & Tools	-	10%	2.00	.20
Merchant's Capital	63,110	10%	2.00	.20
Public Service Corporation	127,308	10%	2.00	.20
TOTAL	<u>\$ 988,387</u>			
<u>1978</u>				
Real Estate	\$ 644,510	10%	2.00	.20
Personal Property	205,770	10%	2.00	.20
Mobile Homes	-	-	-	-
Machinery & Tools	9,770	10%	2.00	.20
Merchant's Capital	175,650	10%	2.00	.20
Public Service Corporation	105,012	10%	2.00	.20
TOTAL	<u>\$1,140,712</u>			
<u>1979</u>				
Real Estate	\$ 652,500	10%	2.00	.20
Personal Property	167,450	10%	2.00	.20
Mobile Homes	-	-	-	-
Machinery & Tools	14,420	10%	2.00	.20
Merchant's Capital	125,704	10%	2.00	.20
Public Service Corporation	91,722	10%	2.00	.20
TOTAL	<u>\$1,051,796</u>			
<u>1980</u>				
Real Estate	\$20,184,850	100%	.10	.10
Personal Property	150,210	10%	3.00	.30
Mobile Homes	453,000	100%	.10	.10
Machinery & Tools	131,330	10%	3.00	.30
Merchant's Capital	97,662	10%	3.00	.30
Public Service Corporation	1,037,739	100%	.10	.10
TOTAL	<u>\$22,054,791</u>		2.00	2.00
			3.00	3.00
<u>1981</u>				
Real Estate	\$20,116,850	100%	.10	.10
Personal Property	163,310	10%	3.00	.30
Mobile Homes	575,838	100%	.10	.10
Machinery & Tools	18,466	10%	3.00	.30
Merchant's Capital	100,608	10%	2.00	.20
Public Service Corporation ¹	1,162,268	100%	.10	.10
TOTAL	<u>\$22,107,340</u>		2.00	2.00
			3.00	3.00

¹Not calculated as of 10/81, estimated by Balzer and Associates

Source: Dickenson County Treasurer's Office
Balzer and Associates

Epilogue to Chapter 8 Financial Analyses "Two Decades Later"

Today, in 1998, the Town of Clintwood, Virginia operates with an annual budget of more than one million dollars. Once the new Red Onion prison becomes operational, the town's combined operations, including general government operation and water and sewer utility services, will equal approximately 1.25 million dollars annually in total. The constituent parts are:

General Fund,	approximately ..	\$ 500,000
Water Fund,	..	\$ 500,000
Sewer Fund,	..	\$ 250,000

		\$ 1,250,000

The budget's growth to current levels from a total of less than one-half million dollars annually in 1980 may, at first blush, seem surprising. However, a review of circumstances surrounding the town's finances makes the budget's growth understandable.

Town of Clintwood financial records from the late 1970's reveal successive annual deficits indicating a state of virtual insolvency. In addition to starting from a deficit position, each of the eighteen years between 1980 and 1998 has been inflationary. Indeed, the federal Consumer Price Index (CPI), which measures changes in the costs of commodities, including labor, recorded a cumulative increase of nearly 100% during the eighteen year period ending in 1998.

In 1986 the Town of Clintwood also annexed approximately 300 new residents, expanding its service base by roughly 25%. As alluded to above, serving, the new Red Onion prison will also expand the town utility customer base.

Various circumstances and actions have enabled the Town of Clintwood to successfully respond to the financial challenges before it in the 1980's and 1990's. The real estate subject to town property taxation increased from an assessed value of \$20,116,850 in 1980 to a 1998 value of \$38,421,069. This helped produce a comparable increase in property revenues during the same time frame. The 1986 annexation, new construction and the effect of inflation generally, as reflected in updated county assessments, caused the increase.

While inflation pulls only certain line items on the revenue side of a municipal budget up with it, it pushes all the items on the expenditure side upward over time. For Clintwood to maintain the level of service funded in its general fund budget, new taxation strategies were employed. In April, 1992, a consumer utility tax payable by tenants and property owners alike with a moderate cap was implemented. In December, 1988, a prepared good and beverage tax, known as the meals tax, was installed at the rate of four percent (4%).

Public utilities are commonly operated as free-standing entities known as enterprise fund activities. Clintwood has applied the philosophy that its water and sewer utilities should not only be free-standing but also self-supporting. In the sewer fund this led to contracting with a private firm(PSG-Prof. Services Group) to operate and maintain its sewer treatment plant. Public

discussions of government frequently include comments like this; "government is a business, it should be run like one." This business analogy has been taken seriously in the operation of Clintwood's water utility system. The control of overhead has been pursued aggressively and is reflected in the system's improved "accountability" figures as explained in chapter five. Placing the revenue collection process on a more business like footing has brought accounts receivable in line with proper expectations. When the opportunity to expand presented itself, with regard to the new prison, negotiations were conducted with an eye on the bottom line.

PART 2
GOALS AND OBJECTIVES

CHAPTER 9

GOALS AND OBJECTIVES

GOALS AND OBJECTIVES

INTRODUCTION:

THE GOALS AND OBJECTIVES ARE THE FOUNDATION OF THE CLINTWOOD PLANNING DOCUMENT. THEY ARE "THE CORNERSTONE OF THE PLANNING PROCESS" FOR THEY PROVIDE THE DIRECTION AND FRAMEWORK FOR PUBLIC AND PRIVATE DECISION-MAKING RELATIVE TO THE PHYSICAL DEVELOPMENT OF THE COMMUNITY.(1)

A GOAL IS A GENERAL STATEMENT OF A FUTURE STATE THAT HAS BEEN DETERMINED TO BE DESIRABLE; IT IS AN END TOWARDS WHICH THE TOWN'S ACTIONS ARE TO BE DIRECTED.

AN OBJECTIVE IS A STATEMENT OF PURPOSE; IT IS A CLEAR AND REALISTIC MEANS OF ACHIEVING A GOAL.

Objectives are realized by the formulation of policies, definitive actions which are officially adopted by the Town and are selected from among carefully specified alternatives. Alternatives (many of which were described in the proceeding inventory and analysis) are founded upon planning principles and standards; rules that provide qualitative and quantitative measurements that serve as the basis for community design or future courses of action.

(1) Goodman, W., ed Principles and Practice of Urban Planning, p. 327.

The planning goals and objectives of the Town of Clintwood are presented on the following pages:

ENVIRONMENTAL GOAL:

TO ELIMINATE EXCESSIVE OR WASTEFUL
LIMITED NATURAL RESOURCES SUCH AS FOSSIL FUEL, LAND SUITABLE FOR
URBANIZATION, FRESH WATER AND AIR, WILDERNESS AREAS,
ENVIRONMENTALLY SENSITIVE AREAS, AND OTHER TYPES OF NON-RENEWABLE
RESOURCES SUCH AS HISTORIC SITES THAT ARE LIMITED IN BOTH LOCATION
AND QUANTITY.

OBJECTIVE:

To establish the location, extent and type of growth and development the natural environment of the town can expect to absorb without either degradation or the endangerment of the public health, safety and welfare.

OBJECTIVE: To direct new development to those areas that are the most intrinsically suited.

OBJECTIVE:

Where in the public interest, to increase the capacity of the natural environment to absorb growth and development by encouraging the construction of appropriate public facilities and capital improvements.

HOUSING GOAL:

TO INSURE THAT ALL CITIZENS HAVE A DECENT HOME IN A SUITABLE LIVING ENVIRONMENT

OBJECTIVE: To encourage the development of a variety of housing that reflects community needs and allows a prospective owner or renter a choice of price, type and location.

OBJECTIVE: To require that all homes, new and existing, be structurally sound and large enough to prevent crowding.

OBJECTIVE: To encourage the removal of all houses (except those of historical or architectural significance) which have serious deficiencies and are not practical to repair.

OBJECTIVE: To insure that all housing is free from the dangers of flooding.

OBJECTIVE: To insure adequate access to and from the areas of work, education, community facilities and services, recreation, public transportation, health care and shopping.

OBJECTIVE: To insure an adequate living environment by providing necessary community services and facilities required to guarantee the public health, safety and welfare.

LAND USE GOAL:

TO INSURE THAT ALL LAND, WITHIN THE CORPORATE LIMITS AS WELL AS LAND ADJOINING AND VITALLY AFFECTING THE DEVELOPMENT OF THE TOWN, BE CONSIDERED A VALUABLE RESOURCE DESERVING OF RESPONSIBLE USE BY ALL CITIZENS, AND BE ABLE TO ACCOMODATE GENERAL GROWTH AND DEVELOPMENT WITHOUT COMPROMISING THE PUBLIC HEALTH, SAFETY, OR WELFARE, ECONOMIC FEASIBILITY, CONVENIENCE, LIVABILITY OR HISTORICAL SIGNIFICANCE.

OBJECTIVE: To develop a community ethic and community trust by basing all land use decisions upon consistent policies, principles and plans.

OBJECTIVE: To develop and observe space and location standards that guide the development of the residential, commercial, industrial, educational, recreational, and civic areas of the community.

OBJECTIVE: To reduce the flood-prone areas of the Town to the maximum extent possible.

OBJECTIVE: To increase the amount of usable land in Town through recovery of flood hazard areas.

OBJECTIVE: To control the amount of improvements and other impediments within flood hazard areas where such improvements and impediments might: (1) aggravate the flooding problem; (2) pose a threat to personal safety; (3) be otherwise contrary to the public interest.

OBJECTIVE: To protect and strengthen the existing downtown area and adjacent shopping center. Accommodate new commercial development through redevelopment and modest expansion in a direction and manner which would minimize disruption in the surrounding area.

OBJECTIVE: To maintain the prevailing low density character of Clintwood. Higher density areas would be limited in number and be located near principal roads, sewer interceptors and water mains.

OBJECTIVE: To utilize scarce undeveloped or uncommitted land in an efficient manner.

OBJECTIVE: To encourage new industrial development within and adjacent to the Town, Identify sites and accommodate the type of industry desired.

OBJECTIVE: To monitor the development of land contiguous to the Town to insure that growth is managed consistently with the principles and policies established by this planning document.

OBJECTIVE: To assume an active role in Dickenson County's planning objectives for the

Clintwood area.

TRANSPORTATION GOAL:

TO ESTABLISH AND MAINTAIN A CIRCULATION SYSTEM THAT FACILITATES THE ECONOMIC, EFFICIENT, AND SAFE MOVEMENT OF PEOPLE AND GOODS WITHIN AND THROUGH THE TOWN.

OBJECTIVE: To develop and maintain a street, highway, and alley network that is compatible with, and complimentary to, the surrounding land use.

OBJECTIVE: To encourage the development of properly designed streets, highways and off-street parking areas which include satisfactory storm drainage facilities.

OBJECTIVE : To develop city-wide pedestrian and non-motorized alternatives that will serve to better manage traffic, improve the environment, conserve resources, increase safety, and encourage utilization of existing educational, recreational and commercial areas.

OBJECTIVE: To promote area-wide public transportation and paratransit systems that are responsive to the needs of the community, but especially the young, the elderly and the handicapped.

ECONOMIC DEVELOPMENT GOAL:

TO ESTABLISH AND MAINTAIN AN ADEQUATE ECONOMIC BASE AND TO
DEVELOP POTENTIAL economic RESOURCES AVAILABLE TO THE COMMUNITY.

OBJECTIVE: To provide suitable space within the Town for industrial development and expansion, and to encourage neighboring governmental agencies to do the same within their respective jurisdictions.

OBJECTIVE: To encourage the arrival of new and suitable Industry as well as the expansion and development of existing industry.

OBJECTIVE: To enhance the commercial base of the community by encouraging rehabilitation, reuse, and new construction in the central business district.

PUBLIC SERVICES AND FACILITIES GOAL:

TO PROVIDE AND ANTICIPATE THOSE COMMUNITY SERVICES AND FACILITIES REQUIRED TO MAINTAIN HIGH STANDARDS OF PUBLIC HEALTH, SAFETY, AND WELFARE.

OBJECTIVE: To provide all residents of the Town an adequate and safe supply of water for human consumption and fire protection.

OBJECTIVE: To expand the Town's water system to serve adjacent developing and developable areas as is consistent with the Town's overall growth policy.

OBJECTIVE: To rehabilitate or replace portions of the existing water distribution system as is required to stop excessive leakage and to insure adequate fire flow.

OBJECTIVE: To provide all residents of the Town a sanitary and economic means of wastewater and solid waste disposal.

OBJECTIVE: To expand the Town's public sewerage system to serve adjacent developing and developable areas as is consistent with the Town's overall growth policy.

OBJECTIVE: To expand the sanitary sewerage treatment facility to accommodate anticipated growth.

OBJECTIVE: To encourage the development of suitable community facilities designed to promote education, the arts, recreation, and efficient municipal administration.

OBJECTIVE: To provide parks, playgrounds, and other recreational facilities located and designed to accommodate a wide range of activities throughout all the seasons, and suitable for the differing needs of all age groups.

PART 3
COMPREHENSIVE
COMMUNITY DEVELOPMENT
PLAN

CHAPTER 10
COMPREHENSIVE
COMMUNITY DEVELOPMENT
PLAN

- FUTURE LAND USE
- MAJOR THOROUGHFARES
- COMMUNITY FACILITIES

THE CLINTWOOD COMPREHENSIVE COMMUNITY DEVELOPMENT PLAN

The Clintwood comprehensive community development plan is an official public document adopted by local government as a policy guide for decisions concerning the physical development of the Town. There are three types of physical development plans.

The short-range project plan is required for specific projects and buildings which can be completed within one to five years. These plans may be contained within the Town's capital improvements program and must reflect the policies of both the mid and long-range plans.

Mid-range plans have a time range of 5 to 10 years. They are more limited in scale and more specific in application than the long-range plans. These plans must be consistent with the long-range goals. Mid-range plans have a project orientation and may take the form of the site development plan.

Longer range plans, such as this one, provide comprehensive and general policies for guiding community growth 5 to 20 years into the future. These plans provide a guide for both public and private decision-making by clearly indicating policy for each type of development. Long-range plans apply to the entire community and should reflect community interrelationships.

Natural and Man-Made Environmental Policies of the Plan:

Natural Environmental Policies

The comprehensive community development plan should provide the basis for all decisions dealing with the use of the environment. It should establish policies that deal with land, water, and air resources; fragile environmental elements, unique natural features such as special conservation or restoration areas, and natural hazard areas; and policies that supervise the use, protection, and production of such things as forests, fisheries, and mines.

Man-Made Environmental Policies

These policies pertain to the general elements of the more traditional comprehensive community development plan. They are divided according to private and public uses. Private uses include commercial, residential, industrial, and institutional facilities and areas. Public uses include those dealing with education, recreation, public housing, communication, and transportation.

Characteristics of Clintwood's Comprehensive Community Development Plan:

Clintwood's comprehensive community development plan must focus on physical development. It must be long-range to provide for the future needs of the community. The plan must specify distant objectives so that the community can progress in one direction. The plan must be

comprehensive, accounting for all of the essential physical elements of the urban area as well as recognizing the importance of the Town's regional setting and the social and economic forces it proposes to accommodate. The plan must be general, and it must remain general. It cannot be vague. It is important to note that private planning and innovation are facilitated primarily when public policies for major public services are very specific and when public policies for guiding and coordinating the development and use of private land are as general and flexible as possible. The general plan must relate the major physical design proposals to the basic plan policies. It must clarify the subordinate role of these proposals to the role of the policies. The plan must be suitable for debate. Two of the primary uses of the plan are policy determination and policy effectuation both of which are the responsibility of the Town Council. This body should act on important questions of policy only after thorough public debate. The plan should be identified as a tool of the Town Council. The plan should be available to the public and easily understood. Its understanding will facilitate its potential as an educational tool. To guarantee that the plan is effective, it must be amendable.

The Uses of the Comprehensive Community Development Plan:

The primary use of the plan is that it allows the Town Council to consider and agree upon a definite set of policies that may be utilized to determine the future physical development of the community and a physical design which will allow the policies to be effectuated. The plan affords the Council an opportunity to evaluate every specific project in view of desirable long-range developmental goals. The plan communicates long-range physical development

policies to both leaders and citizens encouraging constructive debate and action. The nature of the plan enables the Town Council to receive advice and recommendations concerning physical development from the Town planning Commission in a unified and coherent form. The plan allows the members of the Town Council to learn about the physical development problems and opportunities of the community and the relationship of these problems to the social and economic issues involved.

FUTURE LAND USE PLAN

The future land use plan of the Town of Clintwood proposes how growth and rehabilitation should proceed in the future, recognizing the Town's goals, objectives and generally accepted principles and standards of location and space.

The land use goals and objectives of the Town were presented in the proceeding chapter. The following section will define and describe the location and space requirements upon which Clintwood's future land use plan will be founded.

LOCATION REQUIREMENTS:

Location requirements are guiding principles and standards that determine the placement of uses on the land. Location requirements seek to insure the health, safety, convenience, economy and the general amenities of urban living. For example, health and safety standards may deal with the dangers of flooding. Convenience standards may relate to the time and distance which separate land uses. Economic principles may be concerned with land values or the cost of development. Amenity standards may address the livability and general appearance of the community. The way in which each of these principles and standards is defined depends entirely upon local goals and objectives as well as local characteristics. Each locality has its own environmental hazards, fiscal capabilities or concept of convenience.

There are, however, general locational principles and standards that apply to all communities.

They may be categorized as follows:

1. Work Areas (industrial, trade and service)

Industrial:

* Fast, easy and convenient access to good transportation facilities including highway and rail is required.

* A reasonable location with respect to labor supplies, raw materials source, markets, and existing and/or planned urbanization is needed

* A location that is compatible with adjacent land uses and protected from encroachment of residential or other land uses. (Note: compatibility is often determined by the type of industry)

* An adequate amount of land that is as flat as possible, well drained, devoid of low load bearing capacity soils, shallow or pinnacled bed-rock, peat, a high water table and sinkholes is mandatory.

* An adequate amount of land is necessary to accommodate current as well as future industrial demands.

* Property must be under the ownership or control of the Town, County, industrial

development corporation, chamber of commerce, or other person or agency responsible for and desirous of industrial development.

- * An adequate water supply and distribution system is required to provide water for human consumption, manufacturing processes and fire protection.
- * The existing or proposed sewer system must have adequate capacity to accept estimated flows from the proposed development. The sewage treatment plan must have an adequate capacity and capability to treat sewage effluents.
- * Adequate electric and telephone service as well as fuel supplies must be available.

Trade and Service:

- * Trade and service areas should be accessible to living areas but should not occur as spot commercial areas within residential neighborhoods.
- * Commercial areas should be accessible by major streets.
- * Strip or ribbon commercial development along major streets should not be encouraged. Shops and stores should be grouped in a rectangular or square arrangement.
- * Trade and service areas should be located on sites of sufficient size to provide for ample

off-street parking.

- * If possible, compatible commercial enterprises should be grouped together.
- * The central business district should be recognized as the central location of the Town's commercial interests.
- * Commercial establishments designed to serve tourist traffic should be located along tourist routes.
- * Commercial establishments requiring areas for open displays, such as automobile dealers, should be located in outlying areas along major thoroughfares.
- * Shopping centers are more accessible and visible when situated at intersections.

2. Living Areas (residential areas, elderly residential areas, schools and parks)

Residential Areas:

- * Residential areas should be convenient to work areas and leisure time areas by way of thoroughfare routes.
- * Residential areas should be convenient to larger open space and should include smaller

open space areas.

- * Residential areas should be protected from through traffic and incompatible land uses.
- * Residential areas should be located on sites which are economically feasible to develop.
- * Residential areas should be attractive and able to accommodate a wide range of densities.

Elderly Residential Areas:

- * Elderly housing must be located within walking distance (1,500 to 3,000 feet) of commercial, civic, health and government services.
- * Cultural and recreational facilities such as a community elderly center, neighborhood park, and churches should be located within 2,000 feet of the elderly housing site.
- * The location should have immediate access to a lighted, paved, and maintained walkway.
- * The elderly housing site and the pathways to the affiliate service areas should be located so as to insure maximum pedestrian security.
- * The topography of the site should not exceed 10 percent.
- * Elderly housing should be located so as to insure continuing family and friend relationships.

- * Elderly housing should not be located adjacent to strip commercial areas, heavy industry, noise generating land uses, or automotive servicing facilities which are larger than a service station.

Schools and Parks:

- * The elementary school should be near the center of the population to be served.
- * Parks and recreation facilities should be located within residential neighborhoods, easily accessible by walking.

3. Leisure Time Areas (major educational, recreational and cultural facilities)

- * Leisure time areas should be convenient to living areas.
- * Cultural and sporting facilities should be centrally located and on sites of an adequate size.
- * Parks and Open space should take advantage of natural or unusual features and should provide for a variety of activities.

These general principles and standards serve as reference points for assigning locations to Clintwood's future land uses. As these locations are identified and a pattern of distribution is designed, more specific analyses such as land capability, provisions of utilities or ownership may be pursued.

SPACE REQUIREMENTS:

Space requirements are used to determine the amount of land needed to accommodate future growth in the urban area.

Future space requirements are developed by analyzing existing land use and distribution as well as current and projected population and employment characteristics. These indexes are combined with generally accepted standards of space allocation to formulate approximate future guidelines.

Review of Past Development Trends

As described in Chapter 2, Existing Land Use, the consultants evaluated past development trends in Clintwood and the peripheral planning areas by identifying building permits issued for new construction.

Using this data it was determined that 18 acres of vacant land in the Town of Clintwood were converted to active use between January 1977 and July 1981. The corresponding amount of newly developed land in the peripheral planning areas for the same period was 11 acres. Based on this past combined rate of 6.5 acres per annum it was estimated that an additional 124 acres of undeveloped or uncommitted land would be required for development within the Town and the peripheral planning area by the year 2000. Of this amount, 78 acres would be needed in the Town, 46 acres would be required in the planning areas.

Assuming that the past building trends remain constant and the current percentages of land uses continue to the year 2000, the consultants estimate that the 124 acres of land would be developed as follows:

LAND USE	ACREAGE
Residential	94
Commercial	12
Office and Institutional	16
Industrial	2
TOTAL	124 acres

(Note: the total of 124 acres does not include future demand for educational, recreational, civic/cultural, and health facilities or corridor open space and drainage. These land uses will be accounted for in the following discussion.)

Recommended Minimum Spatial Allocations - Year 2000

The following estimated minimum space requirements for Clintwood and the peripheral planning areas for the year 2000 are founded upon projected population and economic growth as well as generally accepted planning principles and standards. The past development trends discussed previously are used only as points of reference (For further detail, please refer to Appendix C)

RESIDENTIAL

TOTAL PROJECTED NEED	CURRENT AMOUNT	DEFICIT
TOTAL 335 acres	169 acres	166 acres
LOW DENSITY 316 acres	168.1 acres	147.9 acres
MEDIUM DENSITY 3 acres	.9 acre	2.1 acres
HIGH DENSITY 16 acres	0 acre	16 acres

Source: Estimates by Balzer and Associates Land Use Survey, Balzer and Associates

COMMERCIAL

<u>TOTAL PROJECTED NEED</u>	<u>CURRENT AMOUNT</u>	<u>DEFICIT</u>
49 acres	35.5 acres	13.5 acres

Sources: Estimates by Balzer and Associates
Land Use Survey, Balzer and Associates

INDUSTRIAL

<u>TOTAL PROJECTED NEED</u>	<u>CURRENT AMOUNT</u>	<u>DEFICIT</u>
TOTAL 194 acres	4.8 acres	179.2 acres
LIGHT 36 acres	4.7 acres	30.3 acres
HEAVY 104 acres	.1 acres	103.9 acres
RESERVE 45 acres	0	45 acres

Sources: Estimates by Balzer and Associates
Land Use Survey, Balzer and Associates

PUBLIC RECREATION

<u>TOTAL PROJECTED NEED</u>	<u>CURRENT AMOUNT</u>	<u>DEFICIT</u>
10 acres	4.7 acres	5.3 acres

Sources: Estimates by Balzer and Associates
Land Use Survey, Balzer and Associates

GOVERNMENT/CIVIC/HEALTH

<u>TOTAL PROJECTED NEED</u>	<u>CURRENT AMOUNT</u>	<u>DEFICIT</u>
50 acres	8 acres	42 acres

Sources: Estimate by Balzer and Associates
Land Use Survey, Balzer and Associates

FUTURE LAND USE CLASSIFICATIONS

The following classifications were utilized to identify future land uses either in the Town and the peripheral planning areas or the courthouse-commercial center (the central business district). The accompanying definitions are intended to be representative of some of the individual uses which may occur within each land use classification.

Residential

- * Low Density Residential - primarily single family homes occurring at a maximum density of 3 units per net residential acre.
- * Medium and High Density Residential - single family, duplex and multi-family homes occurring at a minimum density of 3 units per net residential acre.

Transitional

Transitional Residential/Commercial - a mixed use area characterized by established single family homes, loft apartments, small shops and professional offices.

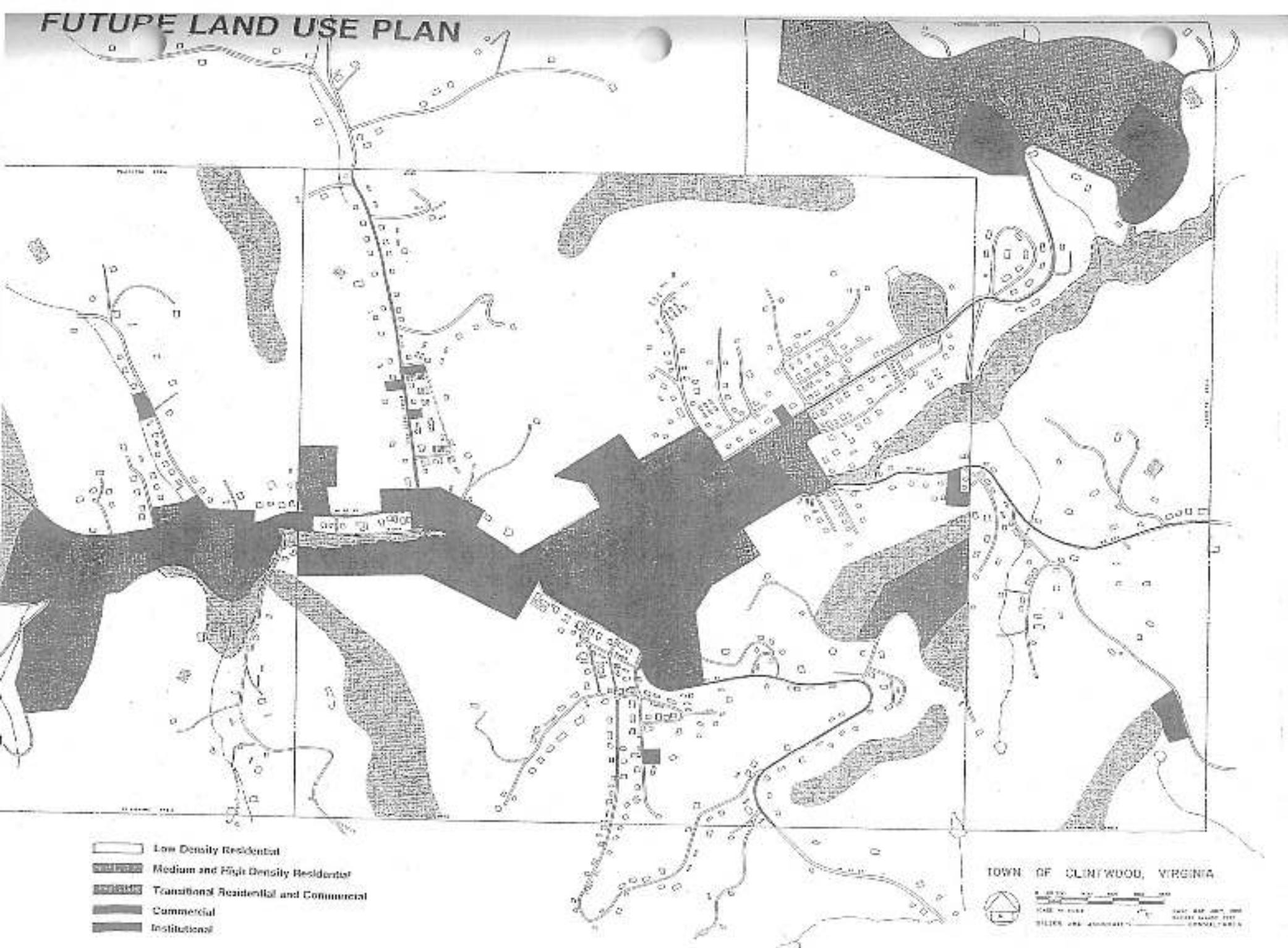
Commercial

- * Retail, Service and Office Commercial - a concentrated area offering retail sales and general, professional and financial services.
- * General Commercial - retail and service uses requiring open areas such as gas stations or automobile dealerships.

Institutional

- * Civic/Government - Town, County, State and Federal government offices, as well as community facilities devoted to history, the arts, and the social needs of the elderly and the poor.
- * Education - high school and elementary school buildings and the accompanying properties.

FUTURE LAND USE PLAN



Health and Health Services - health clinic, health department, or institutional home for the elderly and handicapped.

Industrial

- * Restricted/Light Industrial - manufacturing, assembling, and fabrication conducted within enclosed buildings or in open areas screened from view from adjacent areas.
- * Heavy Industrial - operations which create a large amount of noise, dust, odor, blast or smoke.

Open Environmentally Sensitive Areas

- * Flood Plain - area required to accommodate a 100 year flood.
- * Parks/Recreation - neighborhood or community parkland facility, private recreation facility.
- * Open Space - corridor open space designated to establish an interconnected system of public greenbelts which may be used for recreation, buffers, easements, or pedestrian walkways.

FUTURE LAND USE

CLINTWOOD, VIRGINIA

<u>CATEGORY</u>	<u>ACRES</u>	<u>PERCENT</u>
Low Density Residential	994	76.5
Medium and High Density Residential	69	5.3
Transitional Residential/Commercial	16	1.2
Retail, Service, and Office Commercial	32	2.5
Civic/Government/Health	14	1.0
Education	17	1.3
Restricted/Light Industrial	18	1.4
Heavy Industrial	13	1.0
Park	13	1.0
Open Space	114	8.8
TOTAL	1,300 Acres	100.0%

1. Includes acreage identified as commercial in existing land use survey.

Source: Balzer and Associates

Commentary

- * Low density residential, the predominant future land use designation, functions to preserve the rural characteristics of the community.
- * Medium and high density residential areas are required to insure that the residents of the Clintwood community have a choice of housing types and prices. The future land use area for medium and high density housing has been concentrated primarily in the eastern peripheral planning area adjacent to the elementary school. This location has direct access to the retail and services stores in the courthouse-commercial center (central business district) but is removed from the strip commercial area west of Town and the High School, both of which are major traffic generators.
- * The acreage allocated for future medium and high density residential usage is three times greater than the anticipated need. However,

most of the need (18 acres) was determined to be for higher density multi-family development. The provision of a greater amount of land for future utilization will allow for lower density multi-family development via internal open space or low density residential infill.

- Land for future commercial use has been concentrated primarily in the courthouse-commercial center (central business district). The existing commercial area west of Town has not been enlarged.
- Although land appropriated for future total industrial use is far below the anticipated need, it is assumed that virtually all heavy industrial activity; i.e., mining will take place in the hinterlands. Land designated for future industrial use in the Town and the planning areas should be adequate to accommodate the needs of light, labor intensive industries. If required, limited amounts of this land may also be used for heavy industrial purposes.
- Open space designations were used to protect environmentally sensitive area such as ridge tops and flood hazard areas.

TRANSPORTATION PLAN

The Clintwood transportation plan proposes improvements to the community's vehicular and pedestrian circulation system. The suggested enhancements are founded upon the Town's goals, objectives, desired future land uses and generally accepted planning principles and standards.

The recommendations (which are shown on the Future Land Use and the Clintwood Courthouse-Commercial Center maps on display in the Town Hall) and the desired results are as follows:

- Route T-1001 (McClure Road) should be widened to a paving width of 40 feet.
 - two moving traffic lanes 24 feet wide and 2 parking lanes will improve access to stores and parking facilities located in the interior of the courthouse-commercial center.
- Route T-1009 (Chase Street) between McClure Road and Mullins Avenue should be widened to a paving width of 28 feet.
 - Two moving traffic lanes will facilitate access to the public library, the proposed library park and the proposed Chase Street parking lot.
- The Town should promote the development of the Chase Street Parking Facility.
 - A 40,000 square foot parking lot capable of accomodating approximately 100 vehicles. The facility will utilize the vacant parcel(s) located in the Holly Creek flood plain.
 - The facility will exemplify the merits of proper parking lot landscaping and surface runoff disposal.
 - The facility will increase the total number of off-street parking places in the courthouse-commercial center to over 250.
- The Town should encourage the development of the Walnut Walkway by prohibiting all vehicles, except emergency units, on Walnut Avenue between Alley 4 and McClure Road. Pedestrian comfort and convenience should be provided for.

- The walkway, in conjunction with the proposed adjacent parking facility, will provide for better pedestrian accessibility to existing stores and offices in the courthouse-commercial center. The walkway will provide an impetus for the construction of new stores and shops on parcels that have remained vacant.
- Tax revenue, property values and sales volumes will likely increase.
- * The open space corridors which parallel Holly Creek should be developed as pedestrian, bicycle and bridle paths.
 - The development of these paths will separate non-motorized and vehicular traffic thereby increasing safety and encouraging the utilization of existing educational, recreational and commercial centers.
- * Controlled pedestrian crosswalks should be established on Route 607 in the courthouse-commercial center and near the Clintwood Elementary School.

In addition to these capital improvements, the consultants recommend that the Town adopt the following planning principles and standards to guide the future development of streets, alleys, and pedestrian pathways in Clintwood.

- * Residential driveway entrances should be disallowed on heavily traveled streets.
- * All streets and alleys must be accessible by emergency and service vehicles.
- * Through-traffic on residential streets should be limited.
- * Pedestrian, bicycle and vehicular traffic should be separated.
- * Proper lighting along streets and walkways should be provided.
- * Sight distances should conform to traffic speed, terrain and road alignments.
- * Turning lanes at heavily used intersections should be provided.
- * Provision of streetside sidewalks should only be in response to a need.
- * Future street planning should correlate with the Future Land Use plan contained within this document.

COMMUNITY FACILITIES PLAN

The Clintwood community facilities plan proposes improvements to the community's public parks, and public service accommodations. The suggested enhancements are founded upon the Town's goals, objectives, desired future land uses and generally accepted planning principles and standards.

The recommendations (the locations of which are shown on the Future Land Use and Clintwood Courthouse-Commercial Center maps) are described below:

- * The existing fire station should be enlarged or replaced. The improved facility should be large enough to accommodate 6 vehicles and should have space for drying hose, equipment maintenance and storage, offices and meeting rooms. The consultants estimate that an adequately sized facility would require approximately 4,560 square feet of floor space. If a new building is constructed, the same location should be used.
- * A community recreation facility should be constructed in a central and accessible location. The consultants recommend that a suitable parcel from the proposed library park be used for this purpose. Accommodations for recreation, indoor sports and community meetings should be provided.
- * The Town Council should advocate the establishment of neighborhood parks and playgrounds. The consultants have proposed several parks located in residential areas as well as the expansive park surrounding the existing public library facility.

PART 4

COMMUNITY DEVELOPMENT

PROGRAMMING

COMMUNITY DEVELOPMENT PROGRAMMING

The Community Development Block Grant Program was first authorized in 1974 and subsequently continued under the Housing and Community Development Act of 1977. The Community Development Program, administered by the United States Department of Housing and Urban Development (HUD), was designed to provide financial assistance in the form of grants to communities to meet their housing and community development needs.

The Housing and Community Development Act Amendments of 1981 revised the original Act by shifting the allocation of CDBG funds to States wishing to develop their own Community Development Block Grant Program. Virginia opted to set up its own small cities CDBG Program and gave responsibility for operating the Program to the Virginia Department of Housing and Community Development.

The 1981 Amendment did not, however, change the primary objective of the Community Development Program which continued to be the development of viable

communities, including decent housing and a suitable living environment and expanding economic opportunities, principally for persons of low-and moderate-income. This objective is achieved by the following means:

- * Elimination of slums and blight and the prevention of blighting influences;
- * Prevention of deterioration of property and neighborhood and community facilities;
- * Elimination of conditions detrimental to health, safety, and public welfare;
- * Conservation and expansion of housing opportunities;
- * Increased public services;
- * Improved use of land;
- * Increased neighborhood diversity;
- * Preservation of property with special value; and
- * Alleviation of community physical and economic distress.

What Community Development Block Grants May Be Used For

Grant funds may be used for a variety of local housing and community development needs. The following brief descriptions summarize the project types that are eligible under the Virginia CDBG Program:

- * Comprehensive Community Development
- * Industrial Employment Creation/Retention
- * Marketed Shell Building Program
- * Distressed Communities Economic Development
- * Commercial Employment Creation/Retention
- * Central Business District Revitalization
- * Vocational Education/Sheltered Workshop
- * Tourism
- * Microenterprise Assistance Projects
- * Other Economic Development Projects
- * Housing Preservation
- * Housing Production
- * Other Housing Projects
- * Water and/or Sewer Improvements
- * Drainage/Flood Control
- * Other Community Facilities
- * Day Care Facilities

- * Facilities for Protected Populations
- * Community Centers/Recreation
- * Other Community Service Facilities

Eligible activities within each project type include acquisition and/or development activities that address the structural needs of a community or neighborhood in the areas of community facilities, housing, economic development, comprehensive community development, and community service facilities.

The Town originally established the following priorities for its community development needs in 1982:

1. Courthouse - Commercial Center -
 - acquisition, construction and rehabilitation of commercial buildings
 - center for elderly, handicapped
 - parking facilities
 - pedestrian walkways
 - street improvements
 - flood and drainage facilities
2. Community fire protection facilities
 - enlargement or replacement of existing firehouse

- water line improvements including leak detection
3. Acquisition of land for industrial purposes
 - improvement of the site
 4. Residential rehabilitation

Of these needs, the Town has addressed all of them except the Courthouse-Commercial Center and residential rehabilitation needs. And within the Courthouse-Commercial Center priority, the Town has addressed the need for flood and drainage facilities on Holly Creek. In addition, the very few substandard homes present today are scattered around the community and do not lend themselves to inclusion in a CDBG project.

Therefore, upon review of these needs, the Town Council has identified the Revitalization of Downtown Clintwood as its primary community development need. This would include the acquisition and rehabilitation of commercial buildings and residential structures, as well as the development of parking facilities, street improvements, pedestrian walkways, and recreation facilities in the Central Business District.

APPENDICES

APPENDIX A LEGAL DESCRIPTION OF PERIPHERAL PLANNING AREAS

Legal description of the eastern and western peripheral planning areas is as follows:

BEGINNING at a point on the existing corporate limits said point being the southwest corner of the existing corporate limits, thence with the present corporate limits S 90° 00' W (due west) 2,515 feet to a point; thence N 0° 00' E (due north) 5,280 feet to a point; thence N 90° 00' E (due east) 2,414 feet to a point, said point being the northwest corner of the existing corporate limits; thence with the existing corporate limits N 90° 00' E (due east) 3,510 feet to a point, thence N 0° 00' E (due north) 1,300 feet to a point, thence N 90° 00' E (due east) 3,780 feet to a point, thence S 0° 00' W (due south) 6,580 feet to a point, thence S 90° 00' W (due west) 2,010 feet to a point, said point being the southeast corner of the existing corporate limits, thence with the existing corporate limits S 90° 00' W (due west) 5,280 feet to a point, said point being the southwest corner of the existing corporate limits.

Source: Town of Clintwood

APPENDIX B
LAND USE GUIDE

RESIDENTIAL

- * Single Family
- * Two Family
- * Multi Family
- * Mobile Home

RETAIL AND SERVICE COMMERCIAL

Retail sales and service uses generally enclosed in a structure, including:

- * Motels, hotels
- * Restaurants
- * ABC Store
- * Night Club
- * Barber Shop, Beauty Shop
- * Grocery Store
- * Cleaners
- * Furniture Sales
- * Carpet Sales
- * Theater
- * Pharmacy
- * Sewing Center
- * Lock Smith
- * Car Sales
- * Photography Studio
- * Skate Arena (Skate Lane)

GENERAL COMMERCIAL

Retail and service uses generally not fully enclosed in a structure, including:

- * Gas Station
- * Car Wash
- * Lumber Sales
- * Auto, truck, boat, mobile home, heavy equipment sales
- * Repair garages
- * Veterinary Hospitals
- * Tire recapping

OFFICE and INSTITUTIONAL

- * Banks and other financial institutions
- * Real Estate and Insurance
- * Attorney
- * Public Offices
- * Community Services
- * Clubs
- * Churches
- * Radio and TV Studios
- * Passenger Transportation Terminals
- * Utility Company Offices
- * Medical Offices
- * Hospitals
- * Schools
- * Libraries
- * Newspaper
- * Museum
- * Clinic
- * Senior Citizens Center
- * Mental Health Clinic
- * DMV
- * Funeral Home

LIGHT INDUSTRY

Industrial uses generally enclosed in buildings without outside storage, and including:

- * Wholesale and warehouse facilities
- * Radio and TV transmission facilities
- * Power substations
- * Trucking terminals
- * Public, transportation, and utility company vehicle and equipment, storage and repair facilities
- * Garment Company
- * Water Plant
- * Water storage tank

HEAVY INDUSTRY

Industrial uses generally not fully enclosed in buildings and with outside raw material and product storage and including:

- * Mining
- * Coal loading operations
- * Sawmills
- * Junk yards

PARKS and OPEN SPACE

- * Cemetery
- * Community Athletic Field

APPENDIX C
FUTURE SPACE REQUIREMENTS

Residential

- * Existing households within Clintwood and the peripheral planning area categorized according to household size:

HOUSEHOLD SIZE	1	2	3	4	5 or more	TOTAL
HOUSEHOLDS	137	205	131	97	58	629
% OF TOTAL	21.8	32.7	20.8	15.4	9.2	100.0

Source: Balzer and Associates

Housing Data: Survey conducted by Town of Clintwood July, 1980 and March, 1981.

- * Households for the year 2000 projected and categorized according to household size:

HOUSEHOLD SIZE	1	2	3	4	5 or more	TOTAL
HOUSEHOLDS	190	285	181	134	80	870

Source: Balzer and Associates

(Note: 1980 average household size for Town and planning area, 2.76 and 3.53 respectively, applied to projected Town and planning area populations for the year 2000 to determine total households. 1980 household size percentages as defined above applied to projected totals.)

- * Dwelling type percentage established according to household size:

HOUSEHOLD SIZE	SINGLE FAMILY ¹	DWELLING TYPE		TOTAL
		DUPLEX	MULTI FAMILY	
1	49.0%	1.0%	50.0%	100.0%
2	77.0%	1.5%	21.5%	100.0%
3	90.0%	1.0%	9.0%	100.0%
4	93.5%	1.0%	5.5%	100.0%
5 or more	95.8%	.8%	2.4%	100.0%

¹Includes mobile homes

Source: Balzer and Associates

- Total number of units by dwelling type established for households ranging from 1 to 5 or more persons:

<u>SIZE OF HOUSEHOLD</u>	<u>TOTAL NUMBER OF UNITS</u>	<u>SINGLE FAMILY</u>	<u>DUPLEX</u>	<u>MULTI FAMILY</u>
1	190	93	2	95
2	285	219	5	61
3	181	163	2	16
4	134	125	2	7
5 or more	<u>80</u>	<u>77</u>	<u>1</u>	<u>2</u>
TOTAL	870	677	12	101

Source: Calculated by Balzer and Associates

- Net residential acres determined per dwelling type:

Net residential acres calculated by dividing the total units per dwelling type by desired density of units per net residential acre, multiplied by an affluence factor. The affluence factor varies from 1.2 to 1.4 and indicates the ability to inhabit differing amounts of acreage based on income levels. Higher affluence factors attached to single family homes. The results are as follows:

	<u>TOTAL UNITS</u>	<u>DESIRED DENSITY</u>	<u>AFFLUENCE FACTOR</u>	<u>NET RESIDENTIAL ACRES</u>
SINGLE FAMILY	677	3.0	1.4	315
DUPLEX	12	6.0	1.3	3
MULTI FAMILY	181	14.0	1.2	16

Source: Balzer and Associates

- Residential density classifications:

<u>TYPE</u>	<u>DESIRED DENSITY</u>	<u>NET RESIDENTIAL ACRES</u>
LOW DENSITY	1-3 units	316
MEDIUM DENSITY	3-6 units	3
HIGH DENSITY	6-14 units	16

Commercial

- The commercial element was calculated as 4 percent of the total net acreage.

Industrial

The calculation of industrial area was based upon the number of the persons in the labor force and the type of industrial base. For the purposes of this analysis it was assumed that Clintwood's industrial base is and will continue to be essentially commercial. Industrial density was determined by the number of workers required for the type of job, for example a higher density of workers requires a smaller land area. The following table describes the standards used to calculate future industrial densities for the Town and the planning areas.

<u>DENSITY CATEGORY</u>	<u>PLANNING STANDARD</u>
	<u>WORKERS/NET ACRE</u>
<u>LIGHT</u>	
Printing, publishing, allied industries	48
Food and kindred products	
Lumber and wood products	
Garment production	
<u>LIGHT-INTERMEDIATE</u>	
Research development/testing laboratories	
Machinery (except electrical)	24
Professional, scientific, controlling instruments	
Primary metals industries	
Fabricated metal products	
<u>HEAVY-INTERMEDIATE</u>	
Motor freight transportation/warehousing	
Wholesale trade	12
Paper and allied products	
Electrical machinery equipment, supplies	
<u>HEAVY</u>	
Chemical and allied products	
Furniture and fixtures	6
Petroleum and coal products	

Source: Balzer and Associates

TYPE OF INDUSTRY	Results			TOTAL INDUSTRIAL NET ACRES
	WORKERS ¹	WORKERS/NET ACRE	RESERVE FACTOR	
LIGHT	500	48	3 acres	13 acres
LIGHT-INTERMEDIATE	600	24	8 acres	33 acres
HEAVY-INTERMEDIATE	450	12	12 acres	50 acres
HEAVY	400	6	22 acres	88 acres
TOTAL	1,950		45 acres	184 acres

¹ Estimated potential labor supply available to Clintwood within a 20 mile radius.

Sources: Virginia Employment Commission
Calculations by Balzer and Associates

Public Recreation

The Heritage Conservation and Recreation Service (formerly the Bureau of Outdoor Recreation) of the U. S. Department of the Interior suggests the following space standards for neighborhood facilities:

- * 1.25 acres/1,000 population for playgrounds - usually part of a school ground.
- * 1.25 acres/1,000 population for playfields - active sports activities such as baseball, football and soccer.
- * 2.0 acres/1,000 population for neighborhood parks in multi-family areas.
- * .75 acres/1,000 population for neighborhood parks in single-family areas.

With the predominance of single-family housing in Clintwood, approximately 4.0 acres of neighborhood facilities are needed for every 1,000 persons. By the year 2000 with an estimated population of 2,531 persons, 10 acres of parkland will be required for the residents of the Town and the peripheral planning area.

Civic/Health

- * 20 acres were allocated for Dickenson County health facilities.
- * 30 acres were allocated for Town and County civic facilities.

APPENDIX D
CONSUMER PRICE INDEX ANALYSIS

<u>JANUARY 1st</u>	<u>CPI¹ INDEX</u>	<u>PERCENT CHANGE YEARLY AVERAGE</u>	<u>FACTOR TO CONVERT TO FISCAL 1981 DOLLARS²</u>
(Dec) 1981	258.4	-	1.0
1980	233.2	13.5	1.108
1979	204.7	11.5	1.262
1978	187.2	7.6	1.380
1977	175.3	5.5	1.474
1976	166.7	5.8	1.550
1975	156.1	9.1	1.555
1974	139.7	11.0	1.850
1973	127.7	6.2	2.023
1972	123.2	3.3	2.097

¹Source: Bureau of Labor Statistics
U. S. Department of Labor (1/23/81)

²Calculated by Balzer and Associates, Inc.

APPENDIX IX: VDCR SCORING CRITERIA:
ELIGIBILITY AND CAPACITY BUILDING &
PLANNING, AND VDCR CHECKLIST

Appendix D: Scoring Criteria for Capacity Building & Planning

Virginia Department of Conservation and Recreation
Virginia Community Flood Preparedness Fund Grant Program

Applicant Name: Town of Clintwood		
Eligibility Information		
Criterion	Description	Check One
1. Is the applicant a local government (including counties, cities, towns, municipal corporations, authorities, districts, commissions, or political subdivisions created by the General Assembly or pursuant to the Constitution or laws of the Commonwealth, or any combination of these)?		
Yes	Eligible for consideration	X
No	Not eligible for consideration	
2. Does the local government have an approved resilience plan and has provided a copy or link to the plan with this application?		
Yes	Eligible for consideration under all categories	
No	Eligible for consideration for studies, capacity building, and planning only	X
3. If the applicant is <u>not</u> a town, city, or county, are letters of support from all affected local governments included in this application?		
Yes	Eligible for consideration	NA
No	Not eligible for consideration	NA
4. Has this or any portion of this project been included in any application or program previously funded by the Department?		
Yes	Not eligible for consideration	
No	Eligible for consideration	X
5. Has the applicant provided evidence of an ability to provide the required matching funds?		
Yes	Eligible for consideration	X
No	Not eligible for consideration	
N/A	Match not required	

Capacity Building and Planning Eligible for Consideration		Yes	No
Applicant Name:	Town of Clintwood		
Scoring Information			
Criterion		Point Value	Points Awarded
6. Eligible Capacity Building and Planning Activities (Select all that apply)			
Revisions to existing resilience plans and modifications to existing comprehensive and hazard mitigation plans.		55	
Development of a new resilience plan.		55	55
Resource assessments, planning, strategies and development.		45	45
Policy management and/or development.		40	
Stakeholder engagement and strategies.		25	
Goal planning, implementation and evaluation.		25	
Long term maintenance strategy.		25	25
Other proposals that will significantly improve protection from flooding on a statewide or regional basis.		15	
7. Is the area within the local government to which the grant is targeted socially vulnerable? (Based on ADAPT VA's Social Vulnerability Index Score.)			
Very High Social Vulnerability (More than 1.5)		15	
High Social Vulnerability (1.0 to 1.5)		12	
Moderate Social Vulnerability (0.0 to 1.0)		8	8
Low Social Vulnerability (-1.0 to 0.0)		0	
Very Low Social Vulnerability (Less than -1.0)		0	
8. Is the proposed activity part of an effort to join or remedy the community's probation or suspension from the NFIP?			
Yes		10	
No – Drainage area through Town is 1.79 square miles, deemed too small for the NFIP.		0	NA
9. Is the proposed project in a low-income geographic area as defined in this manual?			
Yes		10	10
No		0	
10. Does this project provide "community scale" benefits?			
Yes		20	20
No			
Total Points			163

Appendix D: Checklist All Categories

Virginia Department of Conservation and Recreation

Community Flood Preparedness Fund Grant Program

Scope of Work Narrative – Town of Clintwood	
Supporting Documentation	Included
Detailed map of the project area(s) (Projects/Studies)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
FIRMette of the project area(s) (Projects/Studies)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Historic flood damage data and/or images (Projects/Studies)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
A link to or a copy of the current floodplain ordinance (<u>copy attached</u>)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Non-Fund financed maintenance and management plan for project extending a minimum of 5 years from project close	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> N/A
A link to or a copy of the current hazard mitigation plan <u>The Town has no Hazard Mitigation Plan. The Dickenson County Plan is attached.</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
A link to or a copy of the current comprehensive plan (<u>copy attached</u>)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Social vulnerability index score(s) for the project area from <u>ADAPT VA's Virginia Vulnerability Viewer</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
If applicant is not a town, city, or county, letters of support from affected communities	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Completed Scoring Criteria Sheet in Appendix B, C, or D	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Budget Narrative	
Supporting Documentation	Included
Authorization to request funding from the Fund from governing body or chief executive of the local government	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Signed pledge agreement from each contributing organization	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> N/A

APPENDIX X: CERTIFIED FLOODPLAIN MANAGER

ASSOCIATION OF STATE

FLOODPLAIN MANAGERS, INC.

CERTIFICATION BOARD OF REGENTS

HEREBY CERTIFIES THAT PURSUANT TO THE PROVISIONS OF THE CHARTER FOR THE
CERTIFIED FLOODPLAIN MANAGER PROGRAM

Chris Rakes, CFM

IS DULY REGISTERED AS AN

ASFPM CERTIFIED FLOODPLAIN MANAGER

IN TESTIMONY WHEREOF THIS CERTIFICATE HAS BEEN ISSUED BY THE AUTHORITY OF THE
CERTIFICATION BOARD OF REGENTS. CERTIFICATE NO. US-19-11075, ISSUED 5/17/2019. THIS
CERTIFICATE SHALL EXPIRE 7/31/2023, UNLESS RENEWED ACCORDING TO THE RULES OF THIS BOARD.

Roger Lindsey

CERTIFICATION BOARD OF REGENTS
PRESIDENT, ROGER LINDSEY, P.E., CFM

Chad M. Berginnis
ASSOCIATION OF STATE FLOODPLAIN MANAGERS
EXECUTIVE DIRECTOR, CHAD M. BERGINNIS, CFM



APPENDIX XI: TOWN FLOODPLAIN ORDINANCE

2. Any use permitted in the Single Family Residential District.
3. Any use permitted in the Multiple Family Residential District.

Section 8. Lot Size Standards

1. Single family dwelling or individual mobile home:

	Minimum Lot Area
A. Without public water service or public sewer service	20,000 sq ft
B. With public water service but not public sewer service	15,000 sq ft
C. With both public water service and public sewer service	5,000 sq ft

Section 9. Yard and Set Back Standards

1. Single Family Dwelling or Individual Mobile Home Minimum In Feet:

Front yard shall be 25 feet from edge of paved road or street or 10 feet from edge of right of way, whichever shall be the greater distance. Side yard 5 feet. Rear yard 15 feet. Total width of both side yards shall be at least 15 feet.

Section 10. Flood Plain District

I. Purpose of the District

The purpose of this district is to aid in the reduction of losses to life and property, the reduction of health and safety hazards, the disruption of commerce and governmental services, the imposition of extraordinary public expenditures for flood protection and relief, and impairments of the tax base, which result from periodic flooding. Recognizing that these flood losses are caused by the cumulative effect of obstructions in floodways causing increases in flood heights and velocity, and the occupancy of flood hazard areas by uses vulnerable to floods or hazardous to others which are inadequately elevated or otherwise protected from flood damages, this district is designed to restrict or prohibit uses which are

dangerous to health, safety, or property in time of flood or cause increased flood heights or velocities by requiring that uses vulnerable to floods, including public facilities which serve such uses, be provided with flood protection at the time of initial construction, and further to protect individuals from purchasing lands which are unsuited for intended purposes because of flood hazard.

II. Application of the District

To enable the district to operate in harmony with the plan for land use and population density embodied in these regulations, the Flood Plain District is created as a special district to be superimposed on other districts contained in these regulations and is to be so designated by a special symbol for its boundaries on the Zoning District Map. Except as they are in conflict with the specific requirements for the Flood Plain District, permitted uses, accessory uses, and signs, minimum lot requirements, minimum yard requirements, maximum height, and requirements for off-street parking and loading, shall be determined by the requirements of the basic district regulations contained elsewhere in this ordinance.

III. Warning and Disclaimer

This section does not imply that areas outside Flood Plain District boundaries or land uses permitted within such districts will be free from flooding or flood damages. The granting of approval of any structure or use or approval of filling shall not constitute a representation, guarantee or warranty of any kind or nature by the Town of Clintwood or the Board of Zoning Appeals, or by any officer or employee of either thereof, of the practicality or safety of any structure or use proposed and shall create no liability upon or cause action against such public body, officer or employee for any damage that may result from such approval.

IV. Permitted Uses

A building or land shall be used only for the following purposes, subject to applicable district regulations:

1. Agriculture and forestry, general farming, truck gardens, cultivation of field crops, orchards, nurseries, turf farming and livestock.

2. Open-type private or commercial recreational uses of facilities.
3. Open-type uses such as open yard areas, loading and unloading areas, parking lots, used car lots, and signs.
4. Storage yards for equipment and material not subject to major damage by floods or which may cause damage by floating away in flood waters and not including inflammables such as gasoline.
5. Facilities and structures necessary for rendering public utility service, including poles, wires, transformers, telephone booths, and the like for normal electrical power distribution or communication service, and pipe lines or conduits for electrical, gas, sewer, or water service, but not including buildings, treatment plants, pumping or regulator stations, sub-stations and power transmission lines which are permitted as conditionals uses.
6. Accessory uses incidental to and customarily found in connection with permitted uses of the premises as determined by this section and applicable district regulations.

V. Special Provisions

1. No structure (temporary or permanent), fill, including fill for roads and levies, deposit, obstruction, storage of materials or equipment or other uses shall be permitted, which acting alone or in combination with existing or future uses, unduly affects the efficiency or the capacity of the floodway or unduly increases flood heights, consideration of the affects of a proposed use shall be based on a reasonable assumption that there will be an equal degree of encroachment extending for a significant reach on both sides of the stream.
2. Any fill proposed to be deposited in the floodway must be shown to have some beneficial purpose and the amount thereof not greater than is necessary to achieve that purpose as demonstrated by a plan submitted by the owner showing the uses to which the filled land will be put and the final dimensions of the proposed fill or other material. Such fill or other materials shall be protected against

erosion by rip-rap, vegetative cover, or bulkheading.

3. Structures shall not be designed for human habitation and shall have a low flood damage potential. The structure or structures, if permitted, shall be constructed and placed on the building site so as to offer the minimum obstruction to the flow of flood waters.
4. The storage or processing of materials that are buoyant, flammable, explosive or could be injurious to human, animal, or plant life in time of flooding, is prohibited. Storage of other material or equipment may be allowed if not subject to major damage by floods, firmly anchored to prevent floatation or shall be readily removable from the area within the limited time available after flood warning.

VI. Encroachment on Drainage Channels and Streams

1. Location of any Structure

Any structure proposed to be located within one hundred (100) feet of any main drainage channel or stream (hereafter referred to as stream) within any zone must be approved by the *Town Council*. *The Town Council* shall determine on the basis of the area of the watershed, and probable runoff, the opening needed for the streams or how close a structure may be built to the stream - in order to assure adequate space for flow of floodwater; provided, however, no building shall be permitted within ten (10) feet of the top of bank of any stream.

2. *Location of Drain Pipes*

Any individual who proposes to install a drain pipe to be located within one hundred (100) feet of any main drainage channel or stream (hereinafter referred to as stream) within any zone must be approved by the Town Council and Building Inspector. A permit to install said drain pipe must be obtained from the Town Hall. The fee for such permit shall be \$25.00. Any individual who proposes to install such a drain pipe must comply with all standards as set forth by the Virginia Department of Transportation and Town Building Inspector. The Town Building Inspector's decision may be appealed to the Board of Zoning Appeals as set forth in Article 6 of this Ordinance.

ARTICLE 5 NONCONFORMING USES

Section 1. Nonconforming Use May Be Continued



CFPF, rr <cfpf@dcr.virginia.gov>

CID510051-DCR1_TownofClintwood_CFPF Grant Application

4 messages

Jennifer Carter <jcarter@thelanegroupinc.com>
To: "cfpf@dcr.virginia.gov" <cfpf@dcr.virginia.gov>
Cc: Jeff Cochran <jcochran@thelanegroupinc.com>, Chris Mullins <cmullins@thelanegroupinc.com>

Thu, Apr 7, 2022 at 1:39 PM

Good afternoon.

Please find the link below for the VDCR-VRA Flood grant application, CID510051-DCR1_TownofClintwood_CFPF.

[CID510051-DCR1_TownofClintwood_CFPF.pdf](#)

Have a great day!

Jen

Jennifer Carter – Administrative Assistant

276.523.3771 – office | 276.523.3568 – fax



Abingdon | Big Stone Gap | Galax



CFPF, rr <cfpf@dcr.virginia.gov>

Thu, Apr 7, 2022 at 1:51 PM

To: Jennifer Carter <jcarter@thelanegroupinc.com>

Cc: Jeff Cochran <jcochran@thelanegroupinc.com>, Chris Mullins <cmullins@thelanegroupinc.com>

Received, thank you.

[Quoted text hidden]

cfpf@dcr.virginia.gov <cfpf@dcr.virginia.gov>

Thu, Apr 7, 2022 at 1:54 PM

To: jcarter@thelanegroupinc.com, jcarter@thelanegroupinc.com

Your message

To: jcarter@thelanegroupinc.com
Subject: CID510051-DCR1_TownofClintwood_CFPF Grant Application
Sent: 4/7/22, 1:39:13 PM AST

was read on 4/7/22, 1:54:03 PM AST

Jennifer Carter <jcarter@thelanegroupinc.com>

Thu, Apr 7, 2022 at 1:54 PM

To: "CFPF, rr" <cfpf@dcr.virginia.gov>

Cc: Jeff Cochran <jcochran@thelanegroupinc.com>, Chris Mullins <cmullins@thelanegroupinc.com>

Great, thank you so much!

[Quoted text hidden]