

Executive Summary

Overview

The Federal Disaster Mitigation Act of 2000 requires all localities to develop and adopt a hazard mitigation plan or participate in a regional plan in order to continue to be eligible for funding through the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grant Program and Pre-Disaster Mitigation Grant Program. This Regional Natural Hazard Mitigation Plan is a multi-jurisdictional plan that enables the localities of the Thomas Jefferson Planning District Commission (TJPDC) –Albemarle County, Fluvanna County, Greene County, Louisa County, Nelson County, the City of Charlottesville, and the Towns of Scottsville, Columbia, Stanardsville, Louisa, and Mineral – to meet this requirement. The plan addresses natural hazards such as flooding, winter storms, and wildfires. It is neither intended nor required to address non-natural disasters, such as terrorism, chemical spills, or similar events.

The lead agency in the preparation of this plan is the Thomas Jefferson Planning District Commission. The Hazard Mitigation Staff Team consisted of staff members at the TJPDC. A Working Group consisting of representatives from the planning department and emergency management department or Administration from each locality guided the preparation of this plan. The larger Advisory Committee included all members of the Working Group, plus additional locality representatives, representatives from state agencies (VDOT, VDOF, VDEM), public and private organizations, representatives from the University of Virginia, and members of the public. The Advisory Committee reviewed the plan at various stages of development and provided input into the process.

An initial meeting of the Advisory Committee was held on February 26, 2004. Two other workshops were held on May 4, 2004 and December 8, 2004. Data collections worksheets were developed and distributed to all of the localities, and an interactive survey regarding hazards and mitigation planning was placed online for citizen input. Additionally, work sessions were held with each locality's Local Emergency Planning Committee to refine a comprehensive list of potential mitigation actions specific to each locality.

Participating localities approved the plan for submission to FEMA between May and July of 2005. Following final approval by FEMA and formal adoption by all localities, the plan will be reviewed annually, and updated on a five-year cycle.

The purpose of this Plan is:

1. To protect life, safety, and property by reducing the potential for future damages and economic losses that result from natural hazards;
2. To meet the requirements of the Disaster Mitigation Act of 2000, and therefore qualify for additional grant funding in both the pre-disaster and post-disaster environment;

3. To speed recovery and redevelopment following future disaster events;
4. To demonstrate a firm local commitment to hazard mitigation and sustainability principles;
5. To comply with both state and federal legislative requirements for local hazard mitigation plans.

Identifying and Prioritizing Hazards

This plan includes descriptions of the history and impacts of any hazards with some likelihood to affect the region, as well as past disaster declarations. In order to prioritize future mitigation efforts, the Working Group evaluated all hazards for frequency of occurrence, magnitude of personal and property damages and interruption of services, and ability to mitigate each type of hazard. As shown in the chart below, the hazards of highest risk to the region are flooding, winter storms, and hurricanes. Hazards of moderate risk are tornadoes, high wind events, and drought. Landslides, earthquakes, wildfire, dam failure, extreme heat, lightning and extreme cold pose a minimal relative threat to the region.

HAZARDS ASSESSMENT TOOL					
EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Low-Mod 3 = Moderate 4 = Hi-Mod 5 = High	0 = N/A 1 = Low 2 = Mod 3 = High	0 = N/A 1 = Low 2 = Mod 3 = High	0 = N/A 1 = Low 2 = Mod 3 = High	0 - 100%
Flooding	5	3	3	2	89%
Blizzards/Icestorms/Winter Storms	5	2	1	2	56%
Hurricanes	3	2	2	2	40%
Tornadoes	2	2	2	2	27%
High Wind / Windstorms	3	2	1	1	27%
Drought	3	0	2	2	27%
Landslides	3	1	1	1	20%
Earthquake	3	1	1	1	20%
Wildfire	2	1	2	1	18%
Dam Failure	1	3	3	2	18%
Extreme Heat	2	2	0	1	13%
Lightning	4	0	1	0	9%
Extreme Cold	1	2	0	1	7%
AVERAGE SCORE	2.64	1.50	1.36	1.29	
		RISK = PROBABILITY * SEVERITY			
		0.24	0.53	0.46	

Vulnerability Assessment

In addition to the work of the Hazard Mitigation staff team of the Thomas Jefferson Planning District Commission, this plan was developed with the input and assistance of many dedicated people, representing a variety of localities and agencies and the general public. They include members of the Hazard Mitigation Working Group, the Advisory Committee, staff of participating localities, Local Emergency Planning Committees, Virginia Department of Emergency Management, students of PLAC 513 (a University of Virginia graduate planning class led by Dr. David Phillips), and private citizens who attended the meetings and responded to an online survey. This plan also benefited from the work of other localities – much of the format is based on hazard mitigation plans developed by the New River Valley Planning District Commission, the City of Chesapeake, Virginia, and the State of Delaware.

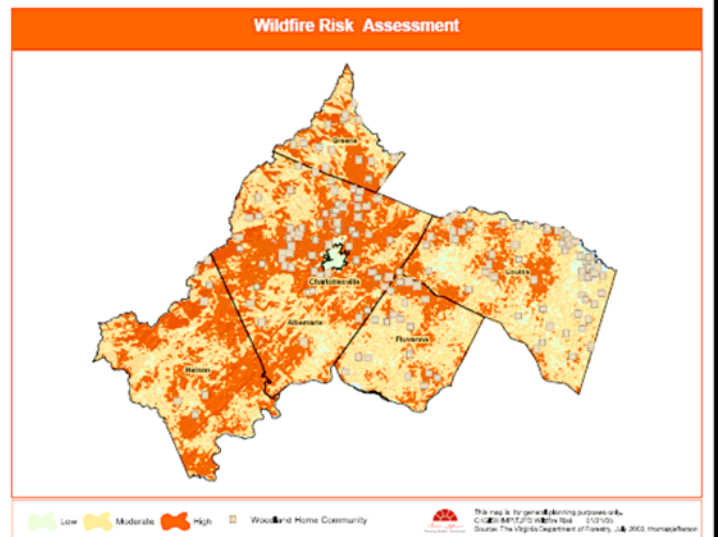
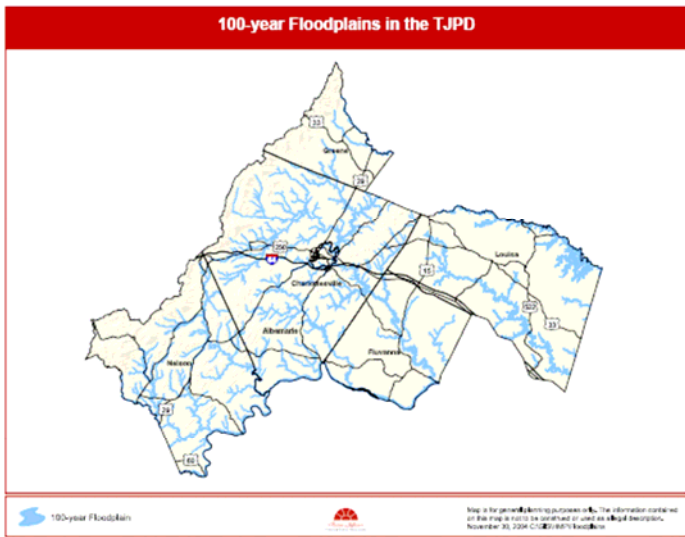
Using Federal, State and local data, areas of high hazard risk are identified such as high water roads and structures located in hazardous areas. Populations residing in a high risk zone are also identified. Using best available data as required by FEMA, the hazard mitigation team located structures and estimated values for all buildings appearing to be located within either the 100-year floodplains or high wildfire risk areas (see figures below). This analysis included current and proposed buildings. Maps are located throughout the plan.

Inventory Assets: Total PDC Hazard: Flood

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Locality	# in Hazard Area	% in Hazard Area	\$ in Locality	\$ in Hazard Area	% in Hazard Area	# in Locality	# in Hazard Area	% in Hazard Area
Residential	72,008	1,342	1.86%	\$11,055,422,000	\$154,127,268	1.394%	199,648	3,225	1.62%
Non-Residential	872	163		\$1,970,887,000	\$35,854,510				
Commercial		45		\$1,437,855,000	\$26,825,910				
Industrial		0		\$218,940,000	undetermined				
Agricultural		93		\$33,461,000	\$7,806,700				
Religious/Non-profit		8		\$106,736,000	\$98,600				
Government		3		\$21,784,000	undetermined				
Education		0		\$152,111,000	undetermined				
Utilities		14			\$1,123,300				
Total	72,880	1505	2.07%	\$23,584,722,384	\$189,981,778	0.81%	199,648	3,225	1.62%

Inventory Assets: Total PDC Hazard: Wildfire

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Locality	# in Hazard Area	% in Hazard Area	\$ in Locality	\$ in Hazard Area	% in Hazard Area	# in Locality	# in Hazard Area	% in Hazard Area
Residential	61732	6106	9.89%	\$11,474,354,100	\$2,125,326,990	18.52%	159549	15434	9.67%



Current and planned critical facilities were also mapped and their building values identified. FEMA defines critical facilities as “facilities that are critical to the health and welfare of the population and that are especially important following hazard events.” For the purposes of this plan, the TJPDC has defined critical facilities as follows:

Emergency Facilities: should be operational directly following a disaster:

- a. Hospitals/medical clinics
- b. Police stations
- c. Fire stations
- d. Emergency operations centers
- e. Shelters

Essential Infrastructure: necessary to retain operational status of community; to be restored as quickly as possible following a disaster:

- a. Transportation systems—includes roads, bridges, rail, airways
- b. Potable water systems
- c. Wastewater systems
- d. Power—including lines, buildings, substations
- e. Communication systems—includes towers and lines
- f. Oil and Natural gas lines

Mitigation Strategy

The mission statement of the TJPDC Regional Natural Hazard Mitigation Plan is:

To protect local residents, property, businesses, and the natural environment from damage by implementing long-term goals to reduce the impacts of natural hazards.

The goals and objectives of the mitigation strategy—which include actions or policy taken to reduce loss of life and property—follow:

GOAL: Through education and training, increase awareness of hazards and potential mitigation strategies.

OBJECTIVE: Educate citizens on techniques for disaster preparedness.

OBJECTIVE: Educate and train key agency staff on disaster mitigation and preparedness, with an emphasis on emergency respondents, building inspectors and code officials.

OBJECTIVE: Develop hazard mitigation educational materials and a process for disseminating information to citizens, local and regional staff and agencies.

OBJECTIVE: Identify outreach methods to reach a large percentage of the population.

GOAL: Build capacity with information and data development to refine hazard identification and assessment, mitigation targeting and funding identification.

OBJECTIVE: Identify data and information needs and develop methods to meet these needs.

OBJECTIVE: Ensure that critical facilities meet disaster preparedness requirements.

OBJECTIVE: Plan for long-term needs to adequately address future conditions that may exacerbate identified hazards.

GOAL: Incorporate Sustainability Accords and mitigation concepts into existing and future policies and plans.

OBJECTIVE: Incorporate mitigation planning concepts into zoning, ordinances and building codes.

OBJECTIVE: Establish or revise policies to ensure that critical facilities and emergency shelters are operational during and after natural disasters.

OBJECTIVE: Link community planning and mitigation planning together to achieve common community goals.

GOAL: Pursue funding to implement identified mitigation strategies.

OBJECTIVE: Identify appropriate funding sources.

OBJECTIVE: Create or strengthen partnerships to develop integrated grant proposals and coordinated implementation plans.

OBJECTIVE: Increase staffing to implement mitigation strategies.

GOAL: Identify and implement physical projects that will directly reduce impacts from hazards.

OBJECTIVE: Elevate, retrofit and relocate existing structures and facilities in vulnerable locations.

OBJECTIVE: Install devices and signage to improve communication and warning systems, ensure operations of emergency shelters, and reduce response time in the event of a natural hazard.

OBJECTIVE: Provide buffers in sensitive areas to protect lives and property.

The TJPDC employed a variety of methods which included research, interviews, questionnaires, surveys and meetings to compile an exhaustive list of mitigation actions which were distributed to each locality. After meeting with each LEPC and the Working Group, individual mitigation actions were selected and prioritized specific to each locality. Priorities of mitigation actions were assigned based on:

- the magnitude of risk*severity of the hazard being mitigated;
- the capability of each locality to complete the actions;
- the cost of the mitigation actions; and
- the timeframe in which projects are more likely to be carried out.

A summary table of the mitigation strategy follows. Mitigation actions are numbered XYZ#, where X denotes locality (Regional, Albemarle, Albemarle – Town of Scottsville, Charlottesville, Fluvanna, Fluvanna – Town of Columbia, Louisa, Louisa – Town of Louisa, Louisa – Town of Mineral, Greene, Greene – Town of Stanardsville, and Nelson), Y denotes priority (Low, Moderate, High) and Z denotes type of mitigation action (Structural; Education and Outreach; Policy, Planning and Funding; Information and Data Development), with projects numbered sequentially within categories.

Regional Project List

Number	Action	Implementation Schedule
RHP1	Write Regional Green Infrastructure Plan	1-2 years
RHI1	Create an Interactive Map Server and Database	1-2 years
RHE1	Create a hazards library and information toolkit	1-3 years
RHP2	Complete the Regional Water Supply Plan	1-2 years
AHE1	Provide a telephone number or website that gives useful information following a disaster	1-2 years
AHE2	Place hazard mitigation plan in local libraries and on locality websites	Upon plan approval
AHE3	Create educational campaign about the benefits of open space protection	Ongoing
AHE4	Provide educational information about the burn permit process	Ongoing
AHE 5	Add emergency preparedness and response information in local phone books	1-2 years
AHI1	Conduct study of resistance of critical facilities to natural hazards	1-3 years
AHI2	Complete water supply study	1 year
AHI3	Coordinate with Fluvanna County on emergency plan for failure of South Fork Rivanna Reservoir Dam	1 year
AHP1	Provide training for building inspectors and code officials on mitigation techniques and hazard-resistant building	1-3 years
AHP2	Incorporate hazard mitigation plan into community plans	1-2 years
AHP3	Conduct Community Emergency Response Team (CERT) classes	Ongoing
AHP4	Increase number of trained emergency responders	As increased population warrants
AHP5	Support tree maintenance program	Ongoing
AHP6	Implement recommendations of water supply study	50 years
AHS1	Ensure that all shelters and public buildings have a battery-powered emergency radio and flashlight	1 year
AHS2	Conduct phase I improvement to Ragged Mountain Reservoir Dam--Add larger spillway and additional concrete reinforcement to spillway	1-5 years
AHS3	Conduct structural evaluations of all current and proposed shelters	1-3 years
AME1	Encourage water conservation	Ongoing
AME2	Create a public education program on disaster preparedness	Ongoing
AME3	Create displays about mitigation actions for use at public events	Ongoing
AME4	Conduct FireWise workshops	2-5 years
AME5	Encourage property owners to clear out dead wood from forests	2-5 years
AMI1	Gather and maintain GIS database on bank restoration needs of Rivanna Reservoir	Ongoing
AMI2	Expand GIS data for use in mitigation planning activities	Ongoing
AMP1	Create Emergency Action Plan for Upper Ragged Mountain Dam	Ongoing
AMP2	Continue to pursue conservation easements in sensitive areas	1-3 years
	Develop cooperative agreement between all agencies involved in emergency management, provide methods of communication between agencies responsible for being present at Emergency Communication Center following disaster, and conduct joint emergency exercises	Ongoing
AMP3	Hire fire code official	2-5 years
AMP4		2-5 years

*XYZ#, where X denotes locality, Y denotes priority, and Z denotes type of mitigation action

Regional Project List

Regional Project List		Implementation Schedule
Number	Action	
AMS1	Install backup generators in shelters and critical facilities	As new shelters and critical facilities are built
AMS2	Build or repair bridges so as to not impede floodwaters	When new bridges are built or repaired
AMS3	Upgrade all area bridges to support emergency vehicles	As repairs are made
AMS4	Complete phase II improvements to Ragged Mountain Reservoir which includes upgrading the Sugar Hollow pipeline	3-5 years
AMS5	Initiate phase II upgrades to Ragged Mountain Reservoir which includes upgrading the pump stations	3-5 years
ALE1	Encourage residents and agencies to clear storm drain inlets, ditches, and channels	Ongoing
ALE2	Establish a "Hazard Awareness Week" with local media to educate public about natural hazards	3-5 years
ALE3	Provide lectures about mitigation to homeowner groups, Ruritan clubs, and other organizations	3-5 years
ALP1	Use recreational trails as fire breaks and access lines	Ongoing
ALP2	Acquire riparian easements in sensitive and/or floodprone areas	3+ years
ALS1	Improve the maintenance of stormwater conveyance systems.	Ongoing
ALS2	Increase capacity of drainage systems and ponds where needed	5+ years
ALS3	Clear creek beds or dredge creeks to remove debris where flooding has increased	5+ years
ALS4	Reduce pollution discharge via stormwater systems	Ongoing
ALS5	Retrofit stormwater management basins	Ongoing
ALS6	Ensure evacuation routes meet proper standards	5+ years
ALS7	Encourage fire breaks in tree farms	Ongoing
ALS8	Install more dry hydrants in high wildfire risk areas	3-5 years
ALS9	Clear ditches of flammable debris	Ongoing
ALS10	Create defensible spaces between Woodland Home Communities and areas of high wildfire risk	5+ years
ALS11	Move shrubs and landscaping away from homes, public buildings, and businesses, and clear dead brush and grass from properties in high wildfire risk areas	Ongoing
ALS12	Maintain and add more fire rings in camping areas for controlled fires	5+ years
ASMP1	Incorporate hazard mitigation plan into community plans	1-5 years
ASLS1	Bury utilities underground in town of Scottsville	1-5 years
CHE1	Provide a telephone number or website that gives useful information following a disaster	1-2 years
CHE2	Place hazard mitigation plan in local libraries and on City website	Upon plan approval
CHE3	Create educational campaign about the benefits of open space and sensitive area protection	Ongoing
CHE4	Add emergency preparedness and response information in local phone books	1-2 years
CHI1	Complete water supply study	1 year
CHP1	Provide training for building inspectors and code officials on mitigation techniques and hazard-resistant building	1-3 years
CHP2	Incorporate hazard mitigation plan into community plans	1-2 years
CHP3	Conduct Community Emergency Response Team (CERT) classes	Ongoing
CHP5	Implement recommendations of water supply study	50 years
CHP6	Provide rebate to homeowners who purchase low-flow appliances	Ongoing

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Regional Project List

Number	Action	Implementation Schedule
CHP7	Encourage more institutions to use low-flow appliances	Ongoing
CHP8	Continue use of the Reverse E911 System	Ongoing
CHP9	Ensure all large facilities have updated evacuation plans	1-3 years
CHP10	Ensure all large facilities have updated shelter in place plans	1-3 years
CHS1	Ensure that all shelters and public buildings have a battery-powered emergency radio and flashlight	1 year
CHS2	Conduct phase I improvement to Ragged Mountain Reservoir Dam--Add larger spillway and additional concrete reinforcement to spillway	1-5 years
CME1	Encourage water conservation	Ongoing
CME2	Create a public education program on disaster preparedness	Ongoing
CME3	Create displays about mitigation actions for use at public events	2-5 years
CMI1	Gather and maintain GIS database on bank restoration needs of Rivanna Reservoir	Ongoing
CMP1	Create Emergency Action Plan for Upper Ragged Mountain Dam	1-3 years
CMP2	Pursue conservation easements in sensitive areas	Ongoing
	Develop cooperative agreement between all agencies involved in emergency management and provide methods of communication between agencies responsible for being present at Emergency Communication Center following disaster and conduct joint emergency exercises	
CMP3		2-5 years
CMP4	Support volunteer groups and encourage collaboration on public outreach and education programs on hazard mitigation	Ongoing
CMP5	Establish plan for municipal operations prior to and during drought	1-5 years
CMP6	Require more stringent policy to discourage floodplain development	2-4 years
CMP7	Prevent clear cutting or removal of forested areas to prevent mudslides	Ongoing
CMP8	Support purchase of rain barrels	Ongoing
CMP9	Develop water restriction policy during drought	3-5 years
	Encourage policy which implements proactive environmental actions to reduce flooding--reduce impervious surfaces, restore wetlands, restore streambanks, add curb extensions to catch leaf debris, etc.	
CMP10		Ongoing
CMP11	Create a media strategy	Ongoing
		When new bridges are built or repaired
CMS1	Build or repair bridges so as to not impede floodwaters	
CMS2	Upgrade all area bridges to support emergency vehicles	As repairs are made
CMS3	Complete phase II improvements to Ragged Mountain Reservoir which includes upgrading the Sugar Hollow pipeline	3-5 years
CMS4	Initiate phase II upgrades to Ragged Mountain Reservoir which includes upgrading the pump stations	3-5 years
CMS5	Put high water marks on bridges	2-5 years
CMS6	Add signage to roads in locations that frequently flood	2-5 years
CMS7	Retrofit emergency services buildings for hazard resistance	3-5 years
CLE3	Provide lectures about mitigation to homeowner groups, Ruritan clubs, and other organizations	3-5 years
CLL4	Conduct channel improvement study to investigate flooding problems	3-5 years
CLP2	Join the Community Rating System	3-5 years
CLP3	Support open space preservation in floodplains	Ongoing

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Regional Project List		Implementation Schedule
Number	Action	
CLP4	Hire a floodplain management official and enforce floodplain regulations	3-5 years
CLP5	Encourage homeowners to install back-flow valves to prevent reverse flow	Ongoing
CLP6	Encourage creek and stream storage capacity through daylighting	5+ years
CLP7	Preserve riparian buffers	Ongoing
CLS1	Improve the maintenance of stormwater conveyance systems.	Ongoing
CLS2	Increase capacity of drainage systems and ponds where needed	5+ years
CLS3	Clear creek beds or dredge creeks to remove debris where flooding has increased	5+ years
CLS4	Reduce pollution discharge via stormwater systems	Ongoing
CLS5	Retrofit stormwater management basins	Ongoing
CLS6	Ensure evacuation routes meet proper standards	5+ years
CLS7	Remove abandoned buildings in floodplains	5+ years
CLS8	Bury power, phone, and cable utility lines underground	5+ years
CLS9	Provide citizens with literature about flood and drought-smart landscaping	3-5 years
FHE1	Provide telephone number and website with useful information before and during a disaster	1-3 years
FHI1	Update National Flood Insurance Maps	1-3 years
FHP1	Conduct structural evaluations and study of resistance to hazards of all current and proposed shelters	1-5 years
FHS1	Retrofit emergency services building for hazard resistance	1-5 years
FHS2	Install backup generators in shelters and critical facilities	1-5 years
FMP1	Create a community toolbox with tools and information for local homeowners	3-5 years
FMP2	Develop water restriction policy during drought	Ongoing
FMP3	Incorporate hazard mitigation plans into community plans	1-3 years
FLE 1	Provide educational lectures about mitigation to homeowner groups, Ruritan clubs, and other organizations	5+ years
FLE 2	Develop an all-hazard resource center at libraries or other public office	3-5 years
FLL2	Encourage protective stormwater mitigation measures such as flood project, reducing impervious surfaces, stilling and infiltration basins, and restoring wetlands in growth areas	5+ years
FLP1	Increase number of trained emergency responders and conduct CERT workshops	Ongoing
FCHE1	Provide telephone number and website with useful information before and during a disaster	1-3 years
FCMP1	Incorporate hazard mitigation plans into community plans	1-5 years
GHE1	Support volunteer groups and encourage collaboration on public outreach and education	Ongoing
GHE2	Provide training for building officials and code inspectors	1 year
GHE3	Place hazard mitigation plan in local libraries and websites	Upon plan adoption and approval
GHI1	Update FEMA Floodplain maps	1-5 years
GHI2	Conduct structural evaluations of current and proposed shelters	1-3 years
GHP1	Establish Reverse E-911 System	1 year
GHP2	Ensure all critical facilities have updated shelter-in-place plans	1-3 years

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Regional Project List			Implementation Schedule
Number	Action		
GHP3	Update driveway codes to allow access for emergency vehicles		1-3 years
GHP4	Routinely inspect fire hydrants		Ongoing
GHS1	Install backup generators in shelters and critical facilities		1-3 years
GME1	Develop all-hazard resource center		2-5 years
GME2	Develop cooperative agreement between all agencies involved in emergency management, provide methods of communication between agencies responsible for being present at Emergency Communication Center following disaster, and conduct joint		Ongoing
GMI1	Standardize GIS data for use in mitigation planning		2-5 years
GMI2	Conduct channel improvement study		3-5 years
GMI3	Create needs survey identifying special populations		1-3 years
GMP1	Support open space preservation in floodplain		Ongoing
GMP2	Ensure evacuation routes are upgraded to proper standards		2-5 years
GMP3	Incorporate hazard mitigation plan into community plans		In next comprehensive plan update
GMP4	Preserve riparian buffers		Ongoing
GMP5	Join the Community Rating System		2-5 years
GMP6	Conduct Citizen Emergency Response Team (CERT) classes		1-3 years
GMP7	Require more stringent policy to discourage floodplain development		In next comprehensive plan, zoning code, and subdivision code update
GMS1	Retrofit emergency services building for hazard resistance		2-5 years
GMS2	Build and repair bridges so as not to impede floodwaters		2-5 years
GLE1	Encourage residents and agencies to clear storm drain inlets, ditches, and channels		Ongoing
GLP1	Investigate safety and maintenance of roads in private communities		3-5 years
GLP2	Ensure primary roads are clear of trees and power lines to the edge of the right of way		5+ years
GLP3	Provide paid fire and rescue staff		3-5 years
GLS1	Increase storage capacity of creeks and streams		5+ years
GLS2	Ensure culverts, streams, channels, storm drains, and gutters remain clear of debris		Ongoing
GLS3	Increase cell phone coverage in rural areas		1-3 years
GLS4	Create defensible space between Woodland Home Communities and areas of high wildfire risk		5+ years
GSHP1	Establish Reverse E-911 System		1 year
GSMP2	Incorporate hazard mitigation plan into community plans		1-5 years
GSL1	Bury utilities in Town of Stanardsville and surrounding area		5+ years
LHE1	Encourage water conservation		Ongoing
LHE2	Provide a telephone number or website with useful information		1 year
LHE3	Provide training for building inspectors and code officials on mitigation techniques and hazard-resistant building		1-3 years
LHE4	Place hazard mitigation plan in local libraries and on locality websites		Upon plan approval

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Regional Project List		
Number	Action	Implementation Schedule
LHP1	Establish Reverse E911 System in all localities	1-3 years
LHP2	Ensure that all large facilities have updated evacuation plans	1 year
LHP3	Ensure all large facilities have updated shelter in place plans	1 year
LHP4	Conduct Community Emergency Response Team (CERT) classes	Ongoing
LHP5	Increase number of trained emergency responders	Ongoing
LHS1	Install backup generators in shelters and critical facilities	Ongoing
LHS2	Put high water marks on bridges	1-2 years
LHS3	Ensure all shelters and public buildings have a battery-powered emergency radio & flashlight	1-2 years
LHS4	Ensure all houses have properly placed E911 address signs	1-2 years
LMS1	Install more dry hydrants	3-5 years
LME1	Create a public education program on how to be self-sufficient following a disaster and on mobilization	2-5 years
LM1	Identify long-term water needs and investigate potential of increased water supply	1-3 years
LM2	Support open space preservation in floodplains	Ongoing
LMP1	Create a needs survey that identifies special need homes or facilities needing attention in case of emergencies or evacuations	3-5 years
LMP2	Update National FEMA Floodplain Maps	1-3 Years
LMP3	Incorporate hazard mitigation plans into community plans	1-3 years
LMP4	Incorporate special needs populations into Hazard Mitigation and Emergency Operations Plans	2-5 years
LMP5	Provide more education about the burn permit process	2-5 years
LMS1	Add signage to roads in locations that frequently flood	2-4 years
LMS2	Increase cell phone coverage in rural areas	2-5 years
LLS1	Create defensible space between Woodland Home Communities and areas of high wildfire risk	5+ years
LL1	Provide stilling and infiltration basins to capture stormwater and return it to the groundwater system	5+ years
LLP1	Track and map space available for pets at local SPCA and other animal shelters	1-5 years
LLP2	Develop driveway codes to allow emergency vehicle access	1-5 years
LLP3	Investigate safety and maintenance of roads in private communities	5+ years
LLP4	Adopt state fire codes and hire fire code officer	5+ years
LLP5	Develop more strict building and landscaping codes to prevent forest fires	5+ years
LLP6	Reduce pollution discharge via stormwater systems	5+ years
LLMP1	Incorporate hazard mitigation plans into community plans	1-5 years
LLS1	Bury utilities underground in town of Louisa	1-5 years
LMMP1	Incorporate hazard mitigation plans into community plans	1-5 years
LMLS1	Bury utilities underground in town of Mineral	1-5 years
NHE1	Provide educational instruction and materials to school age youth and their teachers on proper procedures for responding to natural disasters	1 year

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Regional Project List		Implementation Schedule
Number	Action	
NHP1	Encourage residents to build and maintain private driveways adequate for emergency vehicles	Ongoing
NHP2	Complete installation of Reverse E-911 System	1-2 years
NHS1	Upgrade communication system	When funding is secured
NHS2	Install generators at all emergency shelters	1-3 years
NHS3	Ensure that all houses have properly placed, current 911 street addresses	1-3 years
NHS4	Install drone sirens at each fire and rescue station	1-5 years
NME1	Conduct Firewise Workshops	1-5 years
NMI1	Update FEMA floodplain maps	2-5 years
NMS1	Investigate potential to elevate or otherwise protect roads from flooding: Rt. 617, 29 at Nelson County High School, Knuckle Run, Colleen by Woodland Church, Rt. 56 at Tye River, Rt. 632 at Rockfish River, Johnson Hollow	2-5 years
NMS2	Create defensible spaces between Woodland Home Communities and areas of high wildfire risk	3-5 years
NLP1	Strengthen policy to prohibit development in or near floodplains	3-5 years
NLP2	Join the Community Rating System	5+ years
NLP3	Strengthen building codes to protect homes from wildfires	3-5 years
NLP4	Develop cooperative agreement with surrounding jurisdictions and institutions of higher education to improve communications	2-3 years

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is to provide easy reference to the mitigation action

R Regional

A Albemarle

AS Albemarle - Town of Scottsville

C Charlottesville

F Fluvanna

FC Fluvanna - Town of Columbia

G Greene

GS Greene - Town of Stanardsville

L Louisa

LL Louisa - Town of Louisa

LM Louisa - Town of Mineral

N Nelson

Priority

H High

M Moderate

L Low

Mitigation Action Type

E Education and Outreach

I Information and Data Development

P Planning, Policy, and Funding

S Structural

*XYZ#, where X denotes locality, Y denotes priority, and Z denotes type of mitigation action

Monitoring, Evaluating, and Updating the Plan

The Hazard Mitigation Working Group, supported by TJPDC staff, will implement maintenance activities. The group will meet annually in May or following a major disaster to evaluate progress and review annual impacts or actions which may necessitate changes in the plan. Annual reports will be presented to the TJPDC prior to the May meetings.

The plan will undergo a comprehensive review and evaluation every five years by the Working Group and the TJPDC under the authority of the Board of Supervisors and City Council. The first review will be submitted to FEMA on or before August 1, 2010.

The evaluation will address whether:

1. goals and objectives address current and expected conditions;
2. the nature, magnitude, or type of hazard affecting the region has changed;
3. current resources are appropriate for implementing the plan;
4. important problems such as technical, political, legal, or coordination issues with other agencies have occurred;
5. agencies and other partners are participating as originally proposed.

Ongoing public involvement will be critical to ensure the most accurate and up-to-date plan. Significant amendments to the plan will require a public hearing and other efforts to involve the public will be made as necessary.

Contact Information

Each locality has received a copy of the completed plan to keep on file at the county or city office. The TJPDC will post the plan on their website (www.tjpd.org/environment/hazard.asp).

Members of the public are welcome to submit comments, suggestions or feedback on the plan to the TJPDC, as well as to volunteer to be involved with hazard mitigation efforts. TJPDC and localities represented in the plan will continue efforts to coordinate with volunteer community groups.

At the time of the 5-year review and updating of the plan, the TJPDC will notify the public of the process and will invite public comment and participation.

If you would like more information about the Thomas Jefferson Planning District Regional Hazard Mitigation Plan, contact:

Harrison Rue, Director
Thomas Jefferson Planning District
Commission
P.O. Box 1505
401 E. Water Street

Charlottesville, VA 22902
Telephone: (434) 979-7310
Fax: (434) 979-1597
Email: info@tjpd.org
Virginia Relay Users: Dial 711

Introduction

This section provides a general introduction to the Thomas Jefferson Planning District Commission's Regional Hazard Mitigation Plan. It is broken down into the following six sub-sections:

1. Background
2. Sections of the Plan
3. A Practical Approach to Hazard Mitigation Planning
4. Purpose
5. Scope
6. Documentation of Adoption by All Localities

Hazard: An event or physical condition that has the potential to cause fatalities, injuries, property damage, infrastructure damage, agricultural loss, damage to the environment, interruption of business, or other types of harm or loss.

Mitigation: Sustained action taken to reduce or eliminate the long-term risk to human life and property from natural hazards and their effects. Note that this emphasis on long-term risk distinguishes mitigation from actions geared primarily to emergency preparedness and short-term recovery.

Background

Costs from natural disasters are growing nationwide. The Thomas Jefferson Planning District is no exception. With more people living in areas susceptible to natural hazards, the costs associated with such hazards are also increasing. The localities located in the Thomas Jefferson Planning District (the Counties of Albemarle, Greene, Fluvanna, Louisa, and Nelson, the City of Charlottesville, and the Towns of Scottsville, Columbia, Stanardsville, Louisa, and Mineral) have experienced tremendous growth in the past decade. In order to lessen the growing cost of disaster recovery on the localities, there is a growing need to mitigate the impact of known hazards. Through proper planning and the implementation of policies and projects identified in this Hazard Mitigation Plan, the region and the localities can reduce the likelihood that these events will result in costly disasters.

This Regional Hazard Mitigation Plan begins to take the necessary steps to mitigate natural hazards in our region. **Hazard mitigation** is any sustained action taken to reduce or eliminate the long-term risk to human life and property from natural hazards. It includes both structural measures, such as protecting buildings and infrastructure from the forces of nature and non-structural measures, such as natural resource protection and wise floodplain management. Actions may be targeted to protect existing development, or could be designed to protect future development as well. It is widely accepted that the most effective mitigation measures are implemented at the local government level, where decisions on the regulation and control of development are ultimately made.

This Plan systematically identifies potential hazards and sets goals for implementation over the long-term that will result in a reduction in risk and minimize future losses community-wide. The

purpose of hazard mitigation planning is to identify potential risk areas, such as flood plains, and develop plans to make communities and businesses more resistant to damage from natural hazards. Unlike emergency operations plans or disaster preparedness, this plan seeks to develop ways to lessen the impact of natural disasters on the region's resources through strategic, long range planning. The overall goal of hazard mitigation is to save lives and reduce property damage.

The Thomas Jefferson Planning District Commission's long-term goal is to create community disaster resistance through planning for hazard mitigation before disaster strikes, and to ensure that through recovery planning for land and waterways, the community integrates the concepts and principles of sustainable development through preparedness, prevention, recovery, and reconstruction phases of the process.

Sections of the Plan

This Plan is designed to meet the requirements of the Disaster Mitigation Act of 2000 (DMA2000). The Hazard Mitigation Plan includes the following sections:

1. Planning Process
2. Community Profile
3. Hazard Identification and Analysis
4. Vulnerability Assessment
5. Capabilities Assessment
6. Mitigation Strategies
7. Plan Maintenance Procedures

The **Planning Process** section describes the process by which this plan was developed including a description of the planning team, and overall stakeholder involvement.

The **Community Profile** was completed predominantly through investigative research, along with the use of GIS (geographic information systems) and best available data. It includes narrative descriptions of community characteristics, such as the region's geographical, economic and demographic profiles, and discusses future development trends and implications for hazard vulnerability.

The **Hazard Identification and Analysis** section describes natural hazards in the order in which they pose the greatest threat to the Thomas Jefferson Planning District. It includes a description of the hazard as well as analysis based upon historical data.

The **Vulnerability Assessment** provides an inventory of existing population and buildings, describes development trends, and offers estimates of potential loss based upon historic events as well as local, state, and national data.

The **Capabilities Assessment** provides an examination of the region's capacity to implement meaningful mitigation actions, and identify existing opportunities for program enhancement. Capabilities addressed in this section include staff and organizational capability, technical capability, policy and program capability, fiscal capability, legal authority and political will. The

purpose of this assessment is to identify any existing gaps that may hinder mitigation efforts, and to identify those activities that can facilitate risk reduction efforts.

The **Mitigation Strategy** forms the basis for action — identifying broad policy goal statements, more specific policy objectives and specific action-oriented hazard mitigation actions. Hazard mitigation actions include both policies and projects designed to reduce the impacts of hazardous events.

The **Plan Maintenance Procedures** section describes how the Plan will be implemented, and procedures for monitoring, evaluating, reporting and updating the Plan.

A Practical Approach to Hazard Mitigation Planning

This plan is designed to address natural hazards in the Thomas Jefferson Planning District Commission and to develop prioritized mitigation projects to lessen the impact of natural disasters on the region.

The **benefits of hazard mitigation** are numerous, including:

- Saving lives and reducing property damage
- Protecting critical community facilities
- Reducing exposure to liability
- Minimizing community disruption
- Reducing long-term hazard vulnerability
- Contributing to sustainable communities

More importantly, mitigation planning has the potential to produce long-term benefits by breaking the repetitive cycle of disaster loss. A core assumption of hazard mitigation is that a pre-disaster investment significantly reduces the demand for post-disaster assistance. Further, the adoption of mitigation practices enables local residents, businesses, and industries to more quickly recover from a disaster, getting the economy back on track sooner and with less interruption.

The benefits of mitigation planning go beyond reducing hazard vulnerability. Measures such as the acquisition or regulation of land in known hazard areas can help achieve multiple community goals, such as preserving open space, maintaining environmental health and natural features, and enhancing recreational opportunities.

Examples of mitigation measures include:

- Promoting sound land use practices based on known hazards (zoning, floodplain management, and subdivision ordinances)
- Relocating or elevating structures out of the floodplains
- Distributing information to citizens about risks, mitigation, and preparedness
- Developing, adopting, and enforcing effective building codes and standards
- Engineering roads and bridges to withstand hurricanes and earthquakes
- Using fire retardant materials in new woodland construction
- Structural projects, such as dams, diversions, storm sewers, elevated roadways
- Encouraging adequate insurance, including flood insurance, as final protection against financial loss

- Complying with Federal and State regulations to reduce disaster costs and protect critical facilities

Another important aspect of hazard mitigation is increasing the disaster-resistance and sustainability of a community. Several factors are essential for creating a disaster-resistant, sustainable community:

- Planning at all levels – to ensure that preparedness and prevention become integrated throughout the State
- Partnerships – to stimulate and provide motivation for win-win solutions to reducing cost and reaping benefits
- Public education and outreach – to reach the general public, special needs populations, youth, and children
- Active recruitment of individuals, businesses, and organizations that are visionary as well as pro-active to join in the efforts of promoting disaster-resistant communities
- Marketing success – to educate and raise awareness for the necessity and benefits of effective mitigation
- Consensus on community goals and strategies for achieving them.

Purpose

The purpose of this Plan is:

1. To protect life, safety and property by reducing the potential for future damages and economic losses that result from natural hazards;
2. To meet the requirements of the Disaster Mitigation Act of 2000, and therefore qualify for additional grant funding in both the pre-disaster and post-disaster environment;
3. To speed recovery and redevelopment following future disaster events;
4. To demonstrate a firm local commitment to hazard mitigation principles; and
5. To comply with both state and federal legislative requirements for local hazard mitigation plans.

Scope

This Plan will focus on those hazards determined to present the greatest risk in the region. It covers the Thomas Jefferson Planning District, which includes the Counties of Albemarle, Fluvanna, Greene, Louisa, and Nelson and the City of Charlottesville. The Commonwealth of Virginia recently completed a statewide Hazard Mitigation Plan in conjunction with the regional plans.

Documentation of Adoption by all Localities

201.6(c)5: For multijurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.

The plan will be formally adopted by each of the six localities in the Thomas Jefferson Planning District after approval by FEMA in accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended by the Disaster Mitigation Act of 2000 (DMA2000). DMA2000 established new requirements for the national post-disaster Hazard Mitigation Grant Program (HMGP). DMA2000 states that all localities must have a Hazard Mitigation Plan in place in order to be eligible for HMGP funding. DMA2000 is intended to facilitate cooperation between state and local authorities on risk reduction measures and to expedite funding allocation.

The agenda and minutes from each Planning Commission and Board of Supervisors or City Council meeting at which the plan was adopted contingent on FEMA approval are included in the appendix. All six participating localities approved the locality's portion of the plan for submission to FEMA. The approval process included a public hearing and action by the planning commission and elected body of each locality.

Resolutions documenting the formal adoption of the plan by the six participating localities and the five towns in the region following FEMA approval will be included in the appendix.

Planning Process

This section describes the planning process undertaken by the Thomas Jefferson Planning District Commission in preparation of the Regional Hazard Mitigation Plan. Specific topics include:

- Documentation of the Planning Process
- Coordination Among Agencies
- Timeline
- Planning Committees and Working Group
- Public Involvement

Documentation of the Planning Process

201.6(b) and §201.6(c)(1): An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include: (1) an opportunity for the public to comment on the plan during the drafting stage and prior to plan approval; (2) an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and (3) review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

A key feature of the development of the plan has been achieving widespread participation and input from stakeholders through the Planning District. Documentation of the planning process including meeting notes, sign-in sheets, and survey results are included in the appendices.

The following sections describe the planning process, timeline, agencies and individuals involved, and public participation.

Coordination Among Agencies

44 CFR 201.6(a)(3): Multi-jurisdictional plans may be accepted, as appropriate, as long as each jurisdiction has participated in the process.

This plan was developed by the Thomas Jefferson Planning District Commission and was guided by a Working Group, consisting primarily of planners and emergency operations coordinators in each locality, with input from an Advisory Committee made up of a wide range of community

representatives including business owners, community-based organizations, and various local, state, and federal government agencies. Prior to receiving state and federal funding to develop this plan, a graduate planning class at the University of Virginia assisted in the gathering of data and organizing resources as part of their class project. One of the students from that class, Nicole Gilkeson, became a FEMA Hazard Mitigation Fellow and worked closely with the Thomas Jefferson Planning District Commission to develop this plan.

In addition to regional meetings, meetings were held in each locality, often in conjunction with the Local Emergency Planning Committee.

Timeline

44 CFR 201.6(c)(1): The plan must document the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

Work Plan by Time Table

The following table begins July 2004 with receipt of a grant from VDEM to undertake the planning process. However, TJPDC staff, along with UVA planning students, began the data collection phase early in 2004. The Advisory Committee met twice – once in February 2004 and once in May 2004 – before the official start date of the grant.

Task	7/04	8/04	9/04	10/04	11/04	12/04	1/05	2/05	3/05	4/05	5/05	6/05	7/05	8/05	9/05	10/05	11/05	12/05	1/06	2/06	3/06	
Execute grant contract	◆																					
Working Group Meeting			◆	◆	◆			◆										◆				
Advisory Committee Meeting						◆													◆			
Data Collection	→	→	→	→	→	→	◆															
Meet with LEPCs and locality staff	→	→	→	→	→	→	→	→	→	→	→	→										
On-line survey			→	→	→	→	→	→	→	→	→											
Develop HIRA portion of plan. Submit to VDEM	→	→	→	→	→	→	◆															
Develop mitigation portion of plan							→	→	→	→	→	→	◆									
Presentation and approval to localities											→	→	→	◆								
Submission and Review by VDEM													→	→	◆							
Response to VDEM comments															→	→	◆					
Submission and Review by VDEM/FEMA																→	→	→	◆			
Formal Adoption by localities																		→	→	→	→	◆

Work Plan by Task and Responsible Parties

PLANNING COMMITTEE (Pre-award and on-going)	
Tasks:	
<ul style="list-style-type: none"> • PDC staff met with Dave Phillips, UVA, to discuss student involvement in the project (Dec. 2003) • PDC staff met with students (Jan. 22 & 27, April 1) • Convened Regional Mitigation Advisory Committee (Feb. 2004) • Convened Regional Mitigation Advisory Committee (May 2004) • Developed Memorandum of Understandings with each locality (July 2004) • Convened Working Group monthly (Sept. 8, Oct. 5, Nov. 4) • Convened Regional Mitigation Advisory Committee (Dec. 2004) 	
DATA COLLECTION (Pre-award – Sept 30, 2004)	
Tasks:	
<ul style="list-style-type: none"> • Collected data from localities • Compiled and analyze data for HIRA 	
HAZARD IDENTIFICATION AND RISK ASSESSMENT (July – December 2004)	
Tasks:	
<ul style="list-style-type: none"> • Profiled hazards using available data • Developed appropriate graphics • Reviewed, documented, referenced, and summarized findings • Solicited, received, and incorporated public comment in all participating localities on results of HIRA, vulnerability and loss estimation analyses 	
<ul style="list-style-type: none"> • Submit HIRA vulnerability and loss estimation results for review by State 	
<ul style="list-style-type: none"> • Review of HIRA results and other local/regional plans for proposed mitigation goals, strategies, and projects 	VDEM
CAPABILITY ASSESSMENT (by November 2004)	
<ul style="list-style-type: none"> • Identified each locality's assets • Analyzed current and future development trends • Estimated the potential losses in order to assess the current and future vulnerabilities to the identified hazards 	
GOALS, STRATEGIES, AND PROJECTS (Dec – July 2005)	
Tasks:	
<ul style="list-style-type: none"> • Develop mitigation goals, strategies and projects • Evaluate the benefit costs of the proposed mitigation goals, strategies, and 	TJPDC, HMP Committee

<ul style="list-style-type: none"> • projects, and prioritize the overall list • Prepare the initial project data sheets for each identified mitigation project • Solicit, receive, and incorporate public comment in all participating localities on results of mitigation strategies efforts 	
<ul style="list-style-type: none"> • Present appropriate sections of Plan to locality planning commissions and elected bodies for approval to submit to VDEM/FEMA 	
<ul style="list-style-type: none"> • Submit draft plan to VDEM for review 	
FINAL PLAN SUBMISSION AND REVIEW (August – Oct 2005)	
<p>Tasks:</p> <ul style="list-style-type: none"> • Solicit, receive, and incorporate public comment in all participating and surrounding localities on final draft plan 	TJPDC
<ul style="list-style-type: none"> • Incorporate State comments and prepare final plan for FEMA review, submit final plan to State to submit to FEMA 	TJPDC
<ul style="list-style-type: none"> • FEMA review process and pre-approval 	FEMA – allow two months for review
PLAN ADOPTION PROCESS (Dec 2005 – Feb 2006)	
<ul style="list-style-type: none"> • Formal adoption by localities and towns 	TJPDC; HMP Committee; CAOs
FEMA FINAL PLAN APPROVAL (Feb – March 2006)	
<p>Tasks:</p> <ul style="list-style-type: none"> • Final FEMA review and plan approval 	FEMA
<ul style="list-style-type: none"> • Publish FEMA-approved HMP for distribution 	TJPDC

Planning Committees and Working Group

44 CFR 201.6(c)(1): The plan must document the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

The Working Group met monthly and included representatives from each of the five participating counties and the City of Charlottesville. Towns in the region were represented by their respective county's Working Group member. This was necessary due to the limited staff capacity of the towns. Letters were sent to the mayors of each of the towns informing them of the process, and town documents, such as comprehensive plans, were consulted during the planning process.

The Working Group included:

Name	Affiliation
Wayne Cilimberg	Albemarle County (and Town of Scottsville)
Paul Muhlberger	Albemarle County (and Town of Scottsville)
Kristel Riddervold	City of Charlottesville
Ron Higgins	City of Charlottesville
Kaye Harden	City of Charlottesville, Albemarle County, University of Virginia
Steven Biel	Fluvanna County (and Town of Columbia)
Shelly Wright	Fluvanna County (and Town of Columbia)
David Lawrence	Greene County (and Town of Stanardsville)
Katy Clossin	Greene County (and Town of Stanardsville)
Michael Schlemmer	Louisa County (and Towns of Mineral and Louisa)
Ernie McLeod	Louisa County (and Towns of Mineral and Louisa)
Fred Boger	Nelson County

The Advisory Committee met at critical milestones to provide input into the process. The Advisory Committee was designed to include a wide range of individuals with diverse interests, skills, and backgrounds. It is not a fixed group. We anticipate that participation on the Advisory Committee will continue to grow throughout the planning process. The Advisory Committee meetings were announced on the TJPDC website as well as advertised through press releases sent to all of the locality newspapers and radio stations. Additionally, fliers were emailed to potentially interested organizations and citizen groups, and handed out at a Charlottesville City Streams Task Force Meeting. The following people attended at least one of the Advisory Committee meetings:

Name		Affiliation
Melissa	Barlow	VA Dept of Transportation
Mary	Basilere	American Red Cross
Steven	Biel	Fluvanna County Planning Department
Fred	Boger	Nelson County
Pamela	Buke	Health Department
Wayne	Cilimberg	County of Albemarle Planning
Jonathon	Earl	Alb County Police Dept
Nicole	Gilkerson	UVA Planning Dept
Donald	Hackler	Thomas Jefferson Health District
Kaye	Harden	Alb, Cville, & UVA
Ron	Higgins	Charlottesville Neighborhood Development Svc
Deborah	Lamb	Louisa County
David	Lawrence	Greene County Emergency Services Coordinator
Frances	Lee-Vandell	TJ Health Department

Ernie	McLeod	Louisa County
Barrett	McVary	
Greg	Meade	U.S. Department of Forestry
Nancy	Miner	Fluvanna LEPC
Paul	Muhlberger	Alb. County Public Works
Lory	Pendergraph	UVA Planning Dept
Mike	Peoples	Central VA Chapter American Red Cross
David	Phillips	University of Virginia-Urban Planning
Katie	Phillips	American Red Cross
Leigh	Rosen	UVA Planning Dept
Jessica	Ryan	University of Virginia
Brittany	Shaal	VA Dept of Emergency Management
Michael	Schlemmer	Louisa County Emergency Services Coordinator
Matthias	Smith	Louisa County GIS Coordinator
Denise	Stephenson	American Red Cross
Bruce	Sterling	Virginia Dept of Emergency Management
Stan	Tatum	Land Planning & Design Associates
Milton	Thacker	VA Department of Transportation
Jeff	Werner	Piedmont Environmental Council
Steve	Whitehead	American Red Cross
Chris	Willis	UVA Facilities Management
Shelly	Wright	Fluvanna County

Meetings were held in each locality, often in conjunction with the Local Emergency Planning Committee, to raise awareness about the development of the Hazard Mitigation Plan and to solicit feedback. One information session was held to gather feedback on the Hazard Identification and Risk Assessment portion of the plan, and one meeting was held to brainstorm for locality-specific potential mitigation actions. Meetings were held in Fluvanna County on October 21, 2004 and January 21, 2005, in Greene County on December 20, 2004, in Nelson County on January 16, 2005 and February 15, 2005, and at the Charlottesville/Albemarle/University of Virginia LEPC meetings on October 27, 2004, and January 26, 2005.

The Thomas Jefferson Planning District Commission held weekly internal meetings with staff to coordinate responsibilities, including mapping, data collection, writing, scheduling meetings, and public outreach.

The *Virginia Hazard Mitigation Summit: Planning for Disaster Resilient Communities* was held June 16-18, 2004 at the University of Virginia. The conference brought together citizens and professionals concerned with mitigation planning. State agency representatives, local planning officials, consultants, citizens and university faculty attended the event. The Summit was organized around 25 presentations, highlighting a broad range of experiences with hazard mitigation. TJPDC staff as well as members of the Working Group and Advisory Committee actively participated in the Summit.