APPENDIX B

GLOSSARY

COMMON TERMS

A-Zone – An area that would be flooded by the Base Flood and is the same as a Special Flood Hazard Area (SFHA) or a 100-year floodplain. A-Zones are found on all Flood Hazard Boundary Maps and Flood Insurance Rate Maps (FIRMS).

Acquisition – Removal of structures from the floodplain through purchase and demolition with the property to be forever maintained as open space.

Annual Flood – The flood that is considered the most significant flood event in a one-year cycle of a floodplain.

Base Flood – Sometimes referred to as a 100-year flood, it is a flood of the magnitude that has a one percent chance of occurring in any given year.

Base Flood Elevation (BFE) – Elevation of the 100-year flood. This elevation is the basis of the insurance and floodplain management requirements of the National Flood Insurance Program.

Basin – The largest watershed management unit. A basin drains to a major receiving water such as a large river, estuary or lake.

Benefit Cost Analysis (BCA) – An assessment of project data to determine whether or not the cost of the project is justified by its benefits.

Berm – Small levees, usually built from fill dirt.

Blizzard Warning – Winds or frequent gusts to 35 miles per hour or greater and considerable falling or blowing snow expected to prevail for a period of three hours or longer.

Buffer – Vegetated strips of land surrounding ecosystems.

Buyout – Commonly used term for property acquisition.

Catchment – The smallest watershed management unit. The area that drains an individual development site to its first intersection with a stream.

Channel – A natural or artificial watercourse with definite bed and banks to confine and conduct flowing water.

Check Dam – A small, low dam constructed in a gully or other watercourse to decrease the velocity of stream flow, for minimizing channel scour.

Community Rating System (CRS) – A system, administered by the Federal Emergency Management Agency (FEMA), where communities are recognized for their mitigation efforts that exceed the National Flood Insurance Program (NFIP)'s minimum standards for floodplain regulation. NFIP policyholders in the community are rewarded with reduced annual flood insurance premiums as part of this program.

Confluence – The section where one stream joins another stream.

Crest – The maximum stage or elevation reached or expected to be reached by the water of a specific flood at a given location.

Critical Facility – Facilities that are critical to the health and welfare of the population and are especially important following hazard events. Critical facilities include, but are not limited to, shelters, police and fire stations, and hospitals.

Debris/Debris Flow – Materials (broken bits and pieces of wood, stone, glass, etc.) carried by wind or floodwaters, including objects of various sizes.

Declaration – Presidential finding that a jurisdiction of the United States may receive Federal aid as a result of damages from a major disaster or emergency.

Design Wind Speed Map – A map of the United States development by the American Civil Engineers that depicts wind zones based on frequency and strength of past tornadoes and hurricanes.

Development – Any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, grading, paving, excavation or drilling or storage of equipment or materials.

Digitize – To convert points, lines and area boundaries shown on maps electronically into coordinates for use in computer applications.

Disaster Resistant Communities – A community-based initiative that seeks to reduce vulnerability to natural hazards for the entire designated area through mitigation actions. This approach requires cooperation between individuals and the business sectors of a community to implement effective mitigation strategies.

Drought - a period of abnormally dry weather that persists long enough to produce serious effects like crop damage, water supply shortages, etc.

Dry Floodproofing – Protecting a building by sealing its exterior walls to prevent the entry of flood waters.

Elevation – The process of raising a house or other building so that it is above the height of a given flood to minimize or prevent flood damage.

Emergency – Any hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, drought, fire, explosion, or other catastrophe in any part of the United States which requires Federal emergency assistance to supplement State and local efforts to save lives and protect property, public health and safety, or to avert or lessen the threat of a disaster.

Emergency Operations Plan (EOP) – Sets forth actions to be taken by the State or local governments in response to emergencies or major disasters.

Encroachment – Any physical object placed in a floodplain that hinders the passage of water or otherwise affects flood flow, such as landfills or buildings.

Enhanced Fujita Scale – Rates tornadoes with number value from EF0 to EF5 based on damage indicators and variables to assign wind speed rating.

Erosion – The process of the gradual wearing away of land masses during a flood or storm or over a period of years through the action of wind, water, or other geologic processes.

Federal Emergency Management Agency (FEMA) – began as an independent agency of the Federal government established in 1979, reporting to the President. In 2003, FEMA became part of the U.S. Department of Homeland Security. FEMA's mission is to help people before, during, and after disasters. It reduces loss of life and property damage and protects critical infrastructure from all types of hazards through a comprehensive, risk-based emergency management program of mitigation, preparedness, response, and recovery.

First Floor Elevation – The elevation of the lowest finished floor of a structure.

Flash Flood – A sudden, violent flood that rises quickly and usually is characterized by high flow velocities. Flash floods often result from intense rainfall over a small area, usually in areas of steep terrain with little or no warning where water levels rise at an extremely fast rate.

Flood – A partial or complete inundation of normally dry land areas from 1) the overland flow of a lake, river, stream, ditch, etc.; 2) the unusual and rapid accumulation or runoff of surface waters; or 3) mudflows or the sudden collapse of shoreline land.

Flood Control – Measures taken to keep the flood waters away from specific developments or populated areas by the construction of flood storage reservoirs, channel alterations, dikes and levees, bypass channels, or other engineering works.

Flood Depth – Height of the floodwater surface above the ground surface.

Flood Duration – The length of time a stream is above flood stage or overflowing its banks.

Flood Frequency – A statistical expression referring to how often a flood of a given magnitude can be expected. (Note: the word "frequency" often is omitted to avoid repetition).

Examples:

- 10-year flood – the flood which can be expected to be equaled or exceeded on average once in 10 years; and which would have a 10 percent chance of being equaled or exceeded in any given year.
- 50-year flood - .... two percent chance...in any given year.
- 100-year flood - .... one percent chance...in any given year.
- 500-year flood - ....two-tenths percent chance...in any given year.

Preparedness – Activities to ensure that people are ready for a disaster and respond to it effectively. Preparedness requires figuring out what will be done if essential services break down, developing a plan for contingencies, and practicing the plan.

Project Impact – A project introduced by FEMA as a result of the increasing number and severity of disasters to reduce the damage of disasters. It helped communities protect themselves from the effects of natural disasters by taking actions to reduce disruption and loss.

Rain Gardens – A water quality practice in which plants and soils are used to remove pollutants from stormwater. Also known as bio-retention.

Recovery – Activities necessary to rebuild after a disaster. Recovery activities include rebuilding homes, businesses, and public facilities; clearing debris; repairing roads and bridges; and restoring water, sewer and other essential services.

Recurrence Interval – The time between hazard events of similar size in a given location. It is based on the probability that the given event will be equaled or exceeded in any give year.

Relocation – The process of moving a house or other building to a new location outside the flood hazard area.

Repetitive Loss – An insured structure that has sustained flood damage on more than one occasion with claims of at least $1,000 each within any 10-year period since 1978.

Response – Activities to address the immediate and short-term effects of an emergency or disaster. Response activities include immediate actions to save lives, protect property, and meet basic human needs.

Retrofitting – Making changes to an existing house or other building to protect it from flooding or other

Riparian System – Ecosystem occurring in the interface between aquatic and terrestrial systems, in floodplains and adjacent to rivers and streams. Riparian systems are subject to direct influences of ground and or surface waters, and occasional flooding.

Riprap – Broken stone, cut stone blocks, or rubble that is placed on slopes to protect them from erosion or scouring caused by floodwaters.

Riverine – Relating to, formed by, or resembling a river, including tributaries, streams, brooks, etc. Riverine flooding occurs when a river or stream overflows its banks and causes considerable inundation of nearby land and roads.

Severe Thunderstorm Watch – A severe thunderstorm is expected in the next six hours within an area approximately 120 to 150 miles wide and 300 to 400 miles wide.

Severe Thunderstorm Warning – Indicates a severe thunderstorm is occurring or is imminent in about 30 minutes to 1 hour.

Sinkholes – Natural depressions in the landscape caused by solution and subsidence of earth materials.

Sleet – Rain that turns to ice pellets before reaching the ground. Sleet also causes roads to freeze and become slippery.

Special Flood Hazard Area (SFHA) - The shaded area on a FIRM map that identifies an area that has 1% chance of being flooded in any given year (100-year floodplain).

Stafford Act – Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 100-707, signed into law November 23, 1988; amended the Disaster Relief Act of 1974, PL 93-288. The statutory authority for most Federal disaster response activities especially as they pertain to FEMA and FEMA programs.

Stormwater – Water from precipitation that flows across the ground and pavement when it rains, floods, or when snow and ice melt. The water seeps into the ground or drains into what we call storm sewers.

Substantial Damage – Damage of any origin sustained by a structure whereby the cost of restoring the structure to its pre-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Topography – The elevations of the land surface.

Tornado – A violently rotating column of air extend from thunderstorm to the ground.

Tornado Warning – A tornado has been sighted or indicated by weather radar. Take shelter immediately.

Tornado Watch – Tornadoes are possible.

Tropical Storm – A tropical cyclone with maximum sustained winds greater than 39 mph and less than 74 mph.

Wildland-Urban Interface Zone – The developed area that occupies the boundary between an urban or settled area and the undeveloped natural forest environment.

Vulnerability – A term used to describe how exposed or susceptible to damage an asset is. Vulnerability depends on an asset's construction, contents and the economic value of its function.

Watershed – The area of land that is drained by a river and its tributaries. Ridges or divides separate watersheds from each other.

Wet Floodproofing – Protecting a building by allowing flood waters to enter so that internal and external hydrostatic pressure is equalized. Usually enclosed areas used for parking, storage, or building access are wet floodproofed.

Wetlands – Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

Wildfire - An uncontrollable fire spreading through vegetative fuels, exposing and possibly consuming structures.

Wildland Fire – A fire in which development is essentially nonexistent, except for roads, railroads, power lines and similar facilities.

Winter Storm Watch – A winter storm is possible in your area.

COMMON ACRONYMS

ACS - American Community Survey

ASCE - American Society of Civil Engineers

ASFM - Association of State Floodplain Managers

BCSA - Bath County Service Authority

BFE - Base Flood Elevation

BHNA - Bath-Highland Network Authority

BMP - Best Management Practice

BRIC - Building Resilient Infrastructure and Communities

CDBG - Community Development Block Grant

CDC - Centers for Disease Control and Prevention

CERT - Community Emergency Response Team

CFM - Certified Floodplain Manager

CFPF - Community Flood Preparedness Fund

CFR - Code of Federal Regulations

CIP - Capital Improvement Plan

COOP - Continuity of Operations Plan

CRS - Community Rating System

CSHMP - Central Shenandoah Hazard Mitigation Plan

CSPDC - Central Shenandoah Planning District Commission

CTP - Cooperating Technical Partners

CWPP - Community Wildfire Protection Plan

DCR - Virginia Department of Conservation and Recreation

DEM - Digital Elevation Model

DEQ - Virginia Department of Environmental Quality

DHCD - Virginia Department of Housing and Community Development

DMA2K - Disaster Mitigation Act of 2000

DMME - Virginia Department of Mines, Minerals, and Energy

DSIS - Dam Safety Inventory System

DSS - Department of Social Services

EAP - Emergency Action Plan

EAP - Energy Assistance Program (context-dependent with Emergency Action Plan)

EDRC - Economically Disadvantaged Rural Community

EMA - Emergency Management Agency

EOP - Emergency Operations Plan

EPA - Environmental Protection Agency

ESRI - Environmental Systems Research Institute

ESZ - Emergency Service Zone

FEMA - Federal Emergency Management Agency

FIRM - Flood Insurance Rate Map

FIU - Flood Intelligence Unit

GIS - Geographic Information System

HHPD - High Hazard Potential Dam

HMA - Hazard Mitigation Assistance

HMERP - Hazardous Materials Emergency Response Plan

HMGP - Hazard Mitigation Grant Program

HPAI - Highly Pathogenic Avian Influenza

HUD - U.S. Department of Housing and Urban Development

I&I - Inflow and Infiltration

IBC - International Building Code

IFLOWS - Integrated Flood Observing and Warning System

ISRCP - Initial State Response and Containment Plan

JMU - James Madison University

LEPC - Local Emergency Planning Committee

LOMC - Letter of Map Change

LULC - Land Use/Land Cover

MS4 - Municipal Separate Storm Sewer System

MSA - Maury Service Authority

NFHL - National Flood Hazard Layer

NFIP - National Flood Insurance Program

NID - National Inventory of Dams

NLCD - National Land Cover Database

NOAA - National Oceanic and Atmospheric Administration

NPS - National Park Service

NRI - National Risk Index

NRQZ - National Radio Quiet Zone

NWS - National Weather Service

PER - Preliminary Engineering Report

PPE - Personal Protective Equipment

PSAP - Public Safety Answering Point

RL - Repetitive Loss

RSI - Regional Snowfall Index

SARA - Superfund Amendments and Re-authorization Act

S-A-W - Staunton-Augusta-Waynesboro (used in various contexts)

SCADA - Supervisory Control and Data Acquisition

SFHA - Special Flood Hazard Area

SPI - Standard Precipitation Index

SRL - Severe Repetitive Loss

SVI - Social Vulnerability Index

SWCD - Soil and Water Conservation District

THIRA - Threat and Hazard Identification and Risk Assessment

TMDL - Total Maximum Daily Load

TRI - Toxic Release Inventory

UHI - Urban Heat Island

USBC - Virginia Uniform Statewide Building Code

USDA - U.S. Department of Agriculture

USDM - U.S. Drought Monitor

USGS - U.S. Geological Survey

VARA - Valley Amateur Radio Association

VATI - Virginia Telecommunication Initiative

VBRSP - Virginia Business Ready Sites Program

VDACS - Virginia Department of Agriculture and Consumer Services

VDEM - Virginia Department of Emergency Management

VDH - Virginia Department of Health

VDOF - Virginia Department of Forestry

VDOT - Virginia Department of Transportation

VFMS - Virginia Flood Monitoring System

VOAD - Virginia Voluntary Organizations Active in Disaster

VSWCB - Virginia Soil and Water Conservation Board

WUI - Wildland-Urban Interface