

Anne Arundel County All-Hazard Mitigation Plan

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DRAFT

1 Executive Summary/ Mitigation Table

The Federal Emergency Management Agency (FEMA) defines mitigation as “acting before a disaster strikes to prevent permanently the occurrence of the disaster or to reduce the effects of the disaster when it occurs. It is also used effectively after a disaster to reduce the risk of a repeat disaster.” There are two components that help define the purpose of mitigation. The first component is to protect people and structures; the second is to minimize the costs of disaster response and recovery.

Several years ago the Federal government passed a law, the Disaster Mitigation Act of 2000, which is intended to curb escalating disaster costs. Anne Arundel County responded to this regulation by writing an *All-Hazards Mitigation Plan*.

The County has met the requirements of the regulations by:

- Identifying natural, man-made, and terrorism hazards
- Performing a risk assessment
- Identifying vulnerabilities in the County
- Involving a wide spectrum of County agencies in the process
- Drafting feasible mitigation strategies intended to reduce or eliminate risk to residents and property
- Holding public meetings and incorporating feedback into the plan
- Documenting the formal adoption of the plan.

The following table presents a list of the hazards that are addressed in this plan.

Table 1-1. Hazards

HAZARD	ACRONYM USED
Natural Hazard	
Animal Disease, Outbreak, Blight, or Infestation	AD
Coastal Flooding	CF
Drought	DR
Earthquake	EQ
Extreme Heat	EH
Hurricane, Nor'easters, or Tropical Storm	HU
Landslide or Slope Failure	LA
Public Health Emergency	PH

Riverine Flooding	RF
Severe Thunderstorm or Hailstorm	TH
Severe Winter Storm	WS
Tornado	TO
Wildfire	WF
Man-made Hazards	
Air Pollution	AP
Building, Dwelling, or Vessel Fire	FI
Communication Failure	CO
Critical Fuel Shortage	CS
Dam Failure and Releases	DM
Hazardous Materials Incident (fixed facility)	HM
Mass Transportation Accident	MT
Pipeline	PL
Transportation Accident	TA
Utility Disruption	UD
Terrorism Hazards	
Civil Disorder	CD
Cyber Crime	CC
Terrorism or Sabotage	TS
Weapons of Mass Destruction Attack	WD
Other	
Multi-Hazard	MH
Existing Strategy	ES

The following table presents the County’s mitigation strategies in a prioritized list.

Table 1-2. Prioritized Mitigation Strategies

High Priority Mitigation Strategies		
Mitigation Action AD-1	Ensure existing monitoring capabilities are integrated to provide early warning of outbreak, blight, or infestation	High
Mitigation Action AD-2	Conduct animal disease, blight, or infestation public awareness	High

	and education campaign	
Mitigation Action AP-1	Initiate a community awareness and educational campaign on the dangers of air pollution	High
Mitigation Action CF-1	Initiate a coastal flooding public awareness and education campaign	High
Mitigation Action CS-1	Insure adequate reserves of fuel	High
Mitigation Action DR-1	Initiate a drought public awareness and education campaign	High
Mitigation Action EH-1	Initiate an extreme heat public awareness and education campaign	High
Mitigation Action EQ-1	Initiate an earthquake public awareness and education campaign	High
Mitigation Action FI-1	Conduct fire prevention and fire safety education	High
Mitigation Action HM-1	Conduct public awareness and education campaign about hazardous materials facilities	High
Mitigation Action HU-1	Initiate a hurricane, tropical storm, or nor'easter public education and awareness campaign	High
Mitigation Action HU-2	Educate residents about restraining home heating oil tanks	High
Mitigation Action LA-1	Conduct landslide or slope failure public awareness and education campaign	High
Mitigation Action MH-1	Determine the adequacy of existing shelters	High
Mitigation Action MH-2	Develop evacuation plans, policies, & procedures	High
Mitigation Action MH-3	Design & implement a comprehensive community awareness and education program	High

Mitigation Action MH-4	Develop coordinated interagency debris removal plan	High
Mitigation Action MH-5	Conduct tabletop, functional, and full-scale disaster exercises	High
Mitigation Action MH-6	Identify County response agencies and what they do	High
Mitigation Action PH-1	Establish internal emergency operations plan for the County Department of Health	High
Mitigation Action PH-2	Create plan for mass dispensing of prophylaxis in the event of a bioterrorism attack.	High
Mitigation Action PH-3	Conduct forensic epidemiological meetings for responders to establish roles in investigating a bioterror event	High
Mitigation Action RF-1	Initiate riverine flood public awareness and education campaign	High
Mitigation Action TA-1	Conduct public awareness and education campaign about the transportation of hazardous materials	High
Mitigation Action TH-1	Initiate severe thunderstorm or hailstorm public awareness and education campaign	High
Mitigation Action TO-1	Initiate tornado community outreach and education campaign	High
Mitigation Action WF-1	Initiate wildfire community awareness and education campaign	High
Mitigation Action WS-1	Initiate severe winter storm public awareness and education campaign	High
Medium Priority Mitigation Strategies		
Mitigation Action EH-2	Create database to track at risk populations from extreme heat	Medium
Mitigation Action FI-2	Promote use of new technologies to detect/ suppress fires	Medium

Mitigation Action HM-2	Assist hazardous materials facilities analyze the need for increased security	Medium
Mitigation Action HM-3	Convert water disinfectant process to sodium hypochlorite	Medium
Mitigation Action MH-7	Enhance information base for future mitigation activities	Medium
Mitigation Action MH-8	Identify situations where sheltering in-place is appropriate	Medium
Mitigation Action MH-9	Implement early warning water quality monitoring system	Medium
Mitigation Action MH-10	Modify inactive County water/wastewater facilities	Medium
Mitigation Action MH-11	Establish all-hazard resource clearinghouse	Medium
Mitigation Action MH-12	Formalize hazard mitigation as factor in community development planning	Medium
Mitigation Action MH-13	Explore options for offsite storage of critical County records & data	Medium
Mitigation Action MH-14	Encourage County personnel to take CERT course	Medium
Mitigation Action MH-15	Identify and protect County natural environmental assets	Medium
Mitigation Action MH-16	Examine Storm/waste water treatment capacity	Medium
Mitigation Action TO-2	Create severe weather action plans, conduct drills, designate tornado shelter areas	Medium
Mitigation Action WS-2	Create database to track at risk populations from winter storms	Medium
Low Priority Mitigation Strategies		
Mitigation Action CF-2	Acquire repetitively flooded structures	Low
Mitigation Action CF-3	Elevate repetitively flooded structures	Low
Mitigation Action DF-1	Ensure adequate plans, procedures, and capabilities to respond to a dam failure	Low

Mitigation Action DR-2	Enhance water and energy conservation at County facilities	Low
Mitigation Action DR-3	Provide outreach about updating wells	Low
Mitigation Action EH-3	Increase tree planting along public rights of way	Low
Mitigation Action EH-4	Create plan for cooling centers and shelters	Low
Mitigation Action EH-5	Create cooperate relationship with news outlets for distributing information about extreme heat	Low
Mitigation Action EH-6	Create partnerships to provide fans for extreme heat relief	Low
Mitigation Action FI-3	Conduct fire study using GIS	Low
Mitigation Action HM-4	Provide “best practices” for working around hazardous materials facilities	Low
Mitigation Action HU-3	Acquire repetitively flooded structures	Low
Mitigation Action HU-4	Elevate repetitively flooded structures	Low
Mitigation Action HU-5	Provide education to boating community on preparing and securing boats	Low
Mitigation Action MH-17	Promote use of NOAA “All Hazards” radios for early warning and post-event information to critical facilities	Low
Mitigation Action MH-18	Research and evaluate hazards and data needs for next iteration of Plan	Low
Mitigation Action MH-19	Increase use of insurance coverage	Low
Mitigation Action MH-20	Adopt future updates of International Building Code	Low
Mitigation Action MH-21	Identify and protect County historic assets	Low
Mitigation Action MH-22	Encourage use of appropriate fire prevention measures	Low

Mitigation Action MH-23	Ensure critical area restrictions are enforced	Low
Mitigation Action MT-1	Ensure adequate plans, procedures, and capabilities to respond to a mass transportation accident	Low
Mitigation Action PL-1	Make information about pipelines available to public	Low
Mitigation Action PL-2	Provide “best practices” for working around pipelines	Low
Mitigation Action PL-3	Ensure adequate plans, procedures, and capabilities to respond to a pipeline accident	Low
Mitigation Action RF-2	Acquire repetitively flooded structures	Low
Mitigation Action RF-3	Elevate repetitively flooded structures	Low
Mitigation Action WF-2	Conduct fire study using GIS	Low
Mitigation Action WS-3	Create plan for warming centers and shelters	Low
Mitigation Action WS-4	Create cooperate relationship with news outlets for distributing information about winter storms	Low

The following table presents a list of mitigation actions that the County is already pursuing.

Table 1-3 Existing Mitigation Strategies

Existing Mitigation Strategies	
Mitigation Action ES-1	Established capability for a single, interagency mobile incident command post and communications center
Mitigation Action ES-2	Update Emergency Operations Plan
Mitigation Action ES-3	Policy preventing inappropriate material from being posted to the County Web site
Mitigation Action ES-4	Restrictions on where tanker truck can be filled
Mitigation Action ES-5	Current virus protection and firewall on County computers
Mitigation Action ES-6	Existing steep slope identification and planting program

Mitigation Action ES-7	Existing dam inspection program
Mitigation Action ES-8	Participation in transportation accident reporting program
Mitigation Action ES-9	Established relationship with BGE to reduce power outages
Mitigation Action ES-10	Portable generators for water treatment and distribution facilities and shelters
Mitigation Action ES-11	County adopted 2003 International Building Code
Mitigation Action ES-12	Existing program to recruit and train community volunteers for CERT
Mitigation Action ES-13	BGE conducts an active tree pruning initiative along power lines
Mitigation Action ES-14	Existing enforcement plan for mandatory water rationing
Mitigation Action ES-15	Existing inter-agency Bioterrorism/Emergency Preparedness Workgroup
Mitigation Action ES-16	Passive surveillance for public health conditions
Mitigation Action ES-17	Existing restrictions on CountyView (GIS system) access and distribution
Mitigation Action ES-18	Installed battery backup system for traffic signals
Mitigation Action ES-19	Colonial Pipeline distributes information to property-owners
Mitigation Action ES-20	Program to inventory and restore submerged aquatic vegetation along shoreline areas
Mitigation Action ES-21	Work to attain the ozone standard through a combination of controls on industrial sources, vehicle inspection and maintenance programs, and transportation control measures.
Mitigation Action ES-22	Identify environmentally sensitive areas for acquisition by the County
Mitigation Action ES-23	Identify wetland sites for mitigation banking and establish a County wetland bank
Mitigation Action ES-24	Enforce floodplain regulations
Mitigation Action ES-25	Work with the state to monitor and conserve existing water supplies in the County
Mitigation Action ES-26	Prepare Small Area Plans to refine the type, timing, location, and extent of future

	development, circulation patterns, and community design
Mitigation Action ES-27	Existing strategy to develop interconnected pedestrian ways and bikeways
Mitigation Action ES-28	Existing strategy to develop a tidal shoreline mitigation fund
Mitigation Action ES-29	Use off-site drainage fees, Critical Area, and Tree Bill Reforestation fees to acquire mitigation sites
Mitigation Action ES-30	Existing strategy to provide incentives to encourage renovation, rehabilitation, preservation, adaptive reuse, and protection of historic structures and neighborhoods
Mitigation Action ES-31	Existing strategy to revise development regulations to require undisturbed buffers along upland streams
Mitigation Action ES-32	Existing strategy to revise existing County codes and regulations to protect historic and archaeological resources
Mitigation Action ES-33	Existing strategy to identify and develop incentives for achieving a net gain of tidal and non-tidal wetlands
Mitigation Action ES-34	Existing strategy to incorporate new water and wastewater treatment as it becomes technically and financially feasible
Mitigation Action ES-35	Existing strategy to identify preservation areas and establish growth boundaries
Mitigation Action ES-36	Complete water vulnerability assessments for water supply and water treatment systems

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