



Section 2 Executive Summary

On October 30, 2000, the President signed into law the Disaster Mitigation Act of 2000, also known as DMA2K. Among its other features, DMA2K established a requirement that in order to remain eligible for Federal disaster assistance and grant funds, local and State governments must develop and adopt Hazard Mitigation Plans (HMPs). On February 26, 2002, the Federal Emergency Management Agency published an Interim Final Rule (IFR) that set forth the guidance and regulations under which such plans are supposed to be developed. The IFR provides detailed descriptions of both the planning process that States and localities are required to observe, and the contents of the plan that emerges. The original version of the Anne Arundel County HMP was approved by the State and the Federal Emergency Management Agency in 2005, and was subsequently adopted by the Anne Arundel County Council. The IFR related to mitigation planning specifies that local jurisdictions must update their HMPs every five years, so Anne Arundel County was not required to complete the update until 2010.

Hazard mitigation is often defined as actions taken to reduce the effects of natural hazards on a place and its population. The 2009 HMP update entailed a comprehensive re-evaluation of all parts of the plan, including hazard profiles, risk assessment, mitigation goals, strategies, and mitigation priorities.

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2.1 How the Plan is Organized

The Anne Arundel County Hazard Mitigation Plan Update is organized to parallel the structure provided in the Interim Final Rule [IFR]. The Plan has nine sections and nine Appendices (A-I).

Section 1	Table of Contents
Section 2	Executive Summary
Section 3	Background
Section 4	Approval and Adoption
Section 5	Planning Process
Section 6	Hazard Identification, Profiling, and Ranking
Section 7	Risk Assessment
Section 8	Mitigation Strategy
Section 9	Plan Monitoring and Maintenance

There are references to the IFR throughout the Plan Update. Where possible these provide specific section and subsection notations to aid the review process. The Plan also includes references to the FEMA crosswalk document, which is used in reviewing mitigation plans.

2.2 Background Information on the Plan

The purpose of a mitigation plan is to rationalize the process of determining appropriate hazard mitigation actions. The document includes a detailed characterization of natural hazards in Anne Arundel County; a risk assessment that describes potential losses to physical assets, people and operations; a set of goals, objectives, strategies and actions that will guide Anne Arundel County's mitigation activities, and a detailed plan for implementing and monitoring the Plan. This Plan focuses on four out of the twelve identified hazards with the highest potential for damaging physical assets, people and operations in the County. These hazards are flood, hurricane wind, tornado, and winter storm. Both the risk assessment section and goals sections reflect this emphasis, which was the result of careful consideration and a numerical ranking process carried out by the Mitigation Core Team (MCT).

2.3 Hazards and Risks

Hazards

Sections 6 and 7 of this Plan Update include a detailed description of the process that was used to assess and prioritize Anne Arundel County's risks from natural hazards, and quantitative risk assessments for the County as a whole, and more detailed assessments for certain asset classes. Twelve hazards were initially identified and profiled by the MCT. The hazards included:

1. Riverine Flooding
2. Coastal Flooding
3. Dam Failure and Release
4. Hurricane, Tropical Storm and Nor'easter
5. Drought



Anne Arundel County, Maryland – 2010 Hazard Mitigation Plan Update
Section 2 Executive Summary

6. Earthquakes
7. Extreme Heat
8. Severe Thunderstorm and hailstorm
9. Severe Winter Storm
10. Tornado
11. Wildfire, urban interface fire
12. Erosion

For each of these hazards, the profiles in Section 6 include:

- Description of the Hazard
- Location and Extent of the Hazard
- Severity of the Hazard
- Impact on Life and Property
- Occurrences of the Hazard

Risks

Risk is a numerical calculation of potential future damages. Although the range of events from erosion to winter storms all have some potential to affect the County, the hazard ranking determined that the **Flood, hurricane wind, tornado and winter storm** hazards would be included in the more detailed risk assessment in Section 7. See Section 6.4 for additional details about the criteria used to rank each hazard and the complete results of the hazard ranking. Section 7 includes details about calculation methodologies and results of the risk assessment, which are summarized in Table 2-2.

Table 2.3-1
Summary of Anne Arundel County Flood, Hurricane Wind and Tornado Risks
by Asset and Hazard Type (100-year horizon)

Asset	Hazard	Risk (100-year horizon)
Residential repetitive loss properties	Floods	\$6,877,433
Non-residential repetitive loss properties	Floods	\$1,213,892
City facilities	Varies – FEMA PWs	\$3,204,419
Schools	Varies – FEMA PWs	\$44,290
City facilities	Hurricane wind	\$592,364
Residential properties	Hurricane wind	\$20,400,497
City facilities	Tornado wind	\$23,575,560
Residential properties	Tornado wind	\$75,12,8913
Residential properties	Storm surge	\$21,937,118



2.4 Summary of Goals, Objectives, Strategies and Actions

Section 8 of this Plan describes Anne Arundel County's priorities for mitigation actions. The section prioritizes the actions, describes the funding required, potential sources of funding, the level of support, and the estimated timing of the action. The section also includes the County's hazard mitigation goals, objectives, and strategies.

Anne Arundel County's Hazard Mitigation Goals

1. Protect the residents of Anne Arundel County from natural hazards.
2. Increase public understanding, support and demand for hazard mitigation.
3. Protect existing and new properties.
4. Build and support local capacity and commitment to become less vulnerable to hazards.
5. Maximize resources for investment in hazard mitigation.
6. Reduce the potential impact of natural and man-made disasters on the County's historic assets.
7. Reduce the potential impact of natural and man-made disasters on the County's natural systems.

Objectives and Strategies

Objectives are well-defined intermediate points in the process of achieving goals. Strategies are a specific course of action to achieve the objectives. Anne Arundel County mitigation planning objectives can be found in Section 8.3 *Mitigation Objectives and Strategies*.

Action Items for the Anne Arundel County

The 2005 Mitigation Action Plan was updated to reflect the County's current priorities for specific activities to achieve the seven goals. The twenty-one Action Items included in the Plan Update are described in Section 8.4 found in Table 8.4-2.

This part of Section 8 includes information about the parties responsible for implementing the actions, and about potential sources of funding for mitigation activities.

This Section also integrates specific hazard mitigation projects that have been identified and scoped in accordance with the requirements of the STAPLEE criteria. The projects developed as part of the Plan Update are listed in Section 8 of this plan.



2.5 The Planning Process

Section 5 provides details about the process that was used to develop this Plan. The process closely followed the guidance in the FEMA “386” series of planning guidance, which recommend a four-stage process for developing mitigation plans.

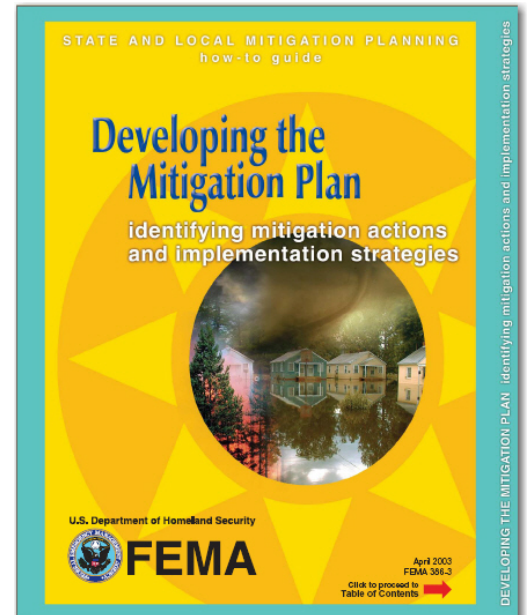
- Step 1 Organize resources**
- Step 2 Assess risks**
- Step 3 Develop a mitigation plan**
- Step 4 Implement the plan and monitor progress**

Step 1 included identification of a Mitigation Core Team (MCT) that was responsible for most aspects of Plan development; and a Stakeholder group, comprised of individuals from the County and surrounding jurisdictions, who were informed of the planning decisions and provided interim versions of the Plan for review and comment. The Anne Arundel County Council is the approving authority for the Plan.

Step 2, the risk assessment, was completed by the MCT. The risk assessment is included as Section 7 of the Plan.

Step 3, development of the Mitigation Plan is described in Section 5 (Planning Process). The section includes details about who was involved, the processes that were used, and the products that were developed.

Step 4, implementing the Plan, is described in the Mitigation Strategy section, which includes details about who is responsible for implementation of specific strategies and actions; and in Section 9, the Plan Monitoring and Maintenance section, which describes long-term implementation through periodic updates and reviews.



2.6 Approval and Adoption Processes

Section 4 discusses the Approval and Adoption of the Update Plan. The Anne Arundel County Council was responsible for approving and adopting the 2010 Hazard Mitigation Plan Update. The Council reviewed and approved the Plan Update on [insert date]. The Town of Highland Beach was also responsible for adopting the Plan due to it being an incorporated jurisdiction. The Town adopted the plan on [insert date].

2.7 Implementation Process

The implementation process is described as part of the specific actions in the Mitigation Strategy section.



2.8 Monitoring and Updating the Plan

Section 9 (Plan Monitoring and Maintenance) describes the schedule and procedures for ensuring that the Plan Update stays current. The section identifies when the Plan must be updated, who is responsible for monitoring the Plan and ensuring that the update procedures are implemented. This section provides a combination of cyclical dates (oriented toward FEMA requirements) and triggering events that will initiate amendments and updates to the Plan. A representative from the Anne Arundel County Office of Emergency Management is responsible for monitoring the Plan and initiating the cyclical update process.