CHAPTER 1 – INTRODUCTION

1.1 Intended Users and Purpose of This Manual

The intended users of this manual are State and local officials with the responsibility to reduce or eliminate risk of property damage and human suffering due to flooding. These officials carry out this responsibility by:

- Assessing risks;
- Developing priorities and strategies to address these risks through what are commonly referred to as "mitigation plans" or area analyses; and
- Working with other community officials and property owners to implement projects that reduce or eliminate the identified risks, also referred to as "mitigation projects."

The purpose of this manual is to assist State and local officials with the last of the three tasks listed above.



CAUTION

This guidance document is provided for assisting in the development of mitigation projects for floodprone structures only. It is not implied that following this guidance will result in the Federal Emergency Management Agency (FEMA) funding the mitigation project in part or in whole. Meeting the requirements of the guidance and/or regulations under each of FEMA's respective mitigation programs is the only way to ensure a mitigation project is eligible for funding under FEMA's grant programs.

This manual provides guidance on how to interpret data collected with the National Flood Mitigation Data Collection Tool (NFMDCT) (also referred to as the "National Tool" or "NT" in this manual) and other sources to develop detailed proposals for flood mitigation projects.

This manual assumes that the community has already completed the mitigation planning process, and that specific structures and/or areas considered high priority for mitigation (due to recurrent, significant flooding) have been identified and local officials are looking to identify specific mitigation measures to meet these priorities. In addition, this manual identifies technical issues associated with many mitigation techniques and references other documents that provide more detailed structure analyses, assessments, and technical guidance.

What is the NT?

As part of ongoing efforts by FEMA to reduce the impact of flooding on people and property, the NT was developed for use by Federal, State, and local mitigation officials to gather information about floodprone properties, including repetitive loss (RL) properties. One of the primary intended uses for the data is determining appropriate mitigation measures for these properties that are both feasible and cost-effective.

The NT software (FEMA 497 CD) may be obtained free of charge by contacting the FEMA Distribution Center at 1-800-480-2520. The *National Flood Mitigation Data Collection Tool User's Manual* (FEMA 497) may be downloaded from FEMA's website at http://www.fema.gov/plan/prevent/floodplain/data_tool.shtm.

1.2 Organization of This Manual

To develop detailed proposals for mitigation projects, there are three "steps" recommended in the decision-making process:

- 1. **Initial screening using NT**: Analyzing data gathered using NT to narrow the available options for mitigation measures (see Section 3.3 for a description of this step);
- 2. **Evaluating the mitigation measures:** Using information from NT and other sources to evaluate the options remaining after the initial screening (see Section 3.5 for a description of this step); and
- 3. **Working with property owners:** Meeting and working with owners of floodprone properties to identify the option preferred by all interested parties and then working to implement it as a fundable mitigation project (see Chapter 11 for a description of this step).

This manual is designed to support such efforts by providing technical guidance on the most appropriate protection measures on an individual basis. It follows a standard process of data collection, evaluation, and decision-making:

- A review of the community's flood problems identifies which areas or buildings should be addressed. This review is often done during preparation of a hazard mitigation plan or area analysis (see Section 1.3 for more information).
- The buildings are visited and data are collected and recorded, preferably using the NFMDCT (also referred to as the "National Tool" or "NT" in this manual). This is described in Chapter 2.
- An analysis of the data identifies the most appropriate mitigation measures, as shown in Chapter 3.
- The most appropriate measures are reviewed in more detail in Chapters 4 through 10.

- The results are reviewed with property owners, who select which measures to pursue (Chapter 11).
- Funds are sought and projects are implemented.

Appendix A contains a sample information packet. Blank worksheets are contained in Appendix B. Appendix C presents information on cost estimating. Determining cost-effectiveness is discussed in Appendix D. Appendix E describes hazard mitigation assistance programs. The FEMA Regional Offices are presented in Appendix F. Appendix G is a listing of State and Tribal Historic Preservation Offices. National Flood Insurance Program (NFIP) State Coordinating Agencies and State Hazard Mitigation Officers are listed in Appendix H. Appendices I and J contain the glossary and list of acronyms, respectively. Appendix K contains the references for the document.

1.3 Available Resources

FEMA 386-1, Getting Started: Building Support for Mitigation Planning.

FEMA 386-2, Understanding Your Risks: Identifying Hazards and Estimating Losses.

FEMA 386-3, Developing the Mitigation Plan: Identifying Mitigation Actions and Implementing Strategies.

FEMA 386-4, Bringing the Plan to Life: Implementing the Hazard Mitigation Plan.

FEMA 511, Reducing Damage from Localized Flooding.

FEMA Community Rating System (CRS). Example Plans.

Schwab, et al. Planning for Post-Disaster Recovery and Redevelopment. American Planning Association (APA) Planning Advisory Service Report Number 483/484.

USACE, Local Floodproofing Programs.

44 Code of Federal Regulations (CFR), Part 201, Mitigation Planning. See http://www.fema.gov/plan/mitplanning/interim final rules.shtm

FEMA Mitigation Planning "How-To" Guides. See http://www.fema.gov/plan/mitplanning/planning_resources.shtm#1

