# UNIT O: ORIENTATION

# In this unit

This orientation presents a summary of the study guide and desk reference:

- ♦ Its goals and objectives,
- ♦ How it is organized,
- ♦ The materials used, and
- Where to get help.

# Contents

A. Introduction	O-3
Study guide objectives	O-4
B. Study guide materials	O-5
Notebook	O-5
Flood insurance study and maps	O-6
Learning Checks	O-6
C. Using the Study Guide	O-7
Where to get help	O-7
D. Acknowledgments	O-8
Illustrations	0-8

## A. Introduction

The responsibility for reducing flood losses is shared by all units of government—local, state and federal—and the private sector.

Fulfilling this responsibility depends on having the knowledge and skills to plan and implement needed floodplain management measures. The fundamental floodplain management program that most others are built on is the National Flood Insurance Program (NFIP).

#### Cover

The house on the cover survived Hurricane Ivan in September 2004 with minimal damage. It is located in an AE Zone on Perdido Bay in Escambia County, Florida. The owner chose to elevate the building on pilings to well above the Base Flood Elevation (BFE). The storm surge in this area approximated the BFE and the nearby pre-FIRM buildings built on slabs were demolished or severely damaged by waves and debris.

The NFIP provides the maps and regulatory basis for local floodplain management. It is also the primary source of insurance protection for floodprone properties. Its success depends on the people responsible for administering its mapping, regulatory and insurance aspects.

This document can serve two purposes. First, it can be used as a study guide to enhance the knowledge and skills of local officials responsible for administering and enforcing local floodplain management regulations. It is also intended to broaden their understanding of floodplain management strategies that can be applied at the local level. Local officials and others can use the study guide to help them study for the exam for the Association of State Floodplain Manager's (ASFPM) Certified Floodplain Manager designation.

Second, the study guide can be used as a desk reference that you can refer to when specific issues arise as you implement your floodplain management ordinance. Guidance is included on how to handle many of these issues and information provided that will help you explain the requirements to citizens of your community. References are included on where to find more information or guidance on many issues. The FEMA documents that are referenced are available from the FEMA Distribution Center at 1-800-480-2520. The address is: Federal Emergency Management Agency, Attention: Publications, PO Box 2012, Jessup, MD 20794-2012. Most of these publications can also be can be downloaded from the FEMA website, http://www.fema.gov.

While any interested person may use this study guide and desk reference, it is written specifically for the local official who is responsible for administering his or her community's floodplain management regulations. Thus, references to "you," assume that you are a local official.

### **STUDY GUIDE OBJECTIVES**

Upon completing this study guide, you should:

- 1. Be familiar with flood hazards and how human development interacts with the natural process of flooding.
- 2. Understand the purpose of the NFIP and your community's role in it.
- 3. Understand the basis for flood maps and data.
- 4. Be able to use floodplain studies and maps to support your floodplain management program.
- 5. Be able to explain the minimum regulatory requirements of the NFIP.
- 6. Be familiar with additional regulatory standards that your community could adopt.
- 7. Understand your responsibilities in administering your community's floodplain regulations for new construction.
- 8. Understand how to administer your community's floodplain regulations for repairs and improvements to existing buildings.
- 9. Be familiar with how flood insurance policies are written and how they relate to your community's regulations.
- 10. Be prepared to administer your floodplain regulations following a disaster.

These 10 objectives are the topics of the 10 units in this study guide.

# **B. STUDY GUIDE MATERIALS**

Study guide materials include text pages and dividers that can be inserted into a loose-leaf notebook. There is also a Flood Insurance Study and map for a sample community that can be ordered separately.

#### *NOTEBOOK*

The loose-leaf notebook holds the primary instructional material —ten units—and eight appendices.

In **Units 1 and 2**, you'll be introduced to the kinds of floods common to communities in the United States, the concepts behind floodplain management and the NFIP.

In **Unit 3**, you'll learn about the various types of flood data needed to administer a floodplain management program.

**Unit 4** discusses how to use the data provided in NFIP studies and maps.

**Unit 5** is the first of four units about administering floodplain management regulations. In Unit 5, you'll find out about the minimum regulatory requirements communities must enforce under the NFIP.

**Unit 6** contains additional measures recommended to help make your regulations more effective and more appropriate to your local flood conditions and community needs.

**Unit** 7 discusses the steps needed to administer a floodplain management ordinance.

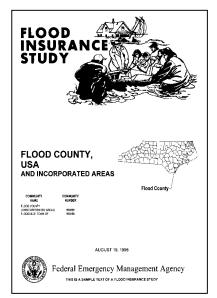
**Unit 8** goes into detail on the special situations of dealing with changes to existing buildings.

In **Unit 9**, the relationship between flood insurance and your floodplain management program is reviewed.

Unit 10 reviews the things you need to be ready for following a disaster and how you can make your community's program more effective in reducing flood losses.

The eight appendices provide contacts for assistance, references, technical terms, and NFIP materials.

#### FLOOD INSURANCE STUDY AND MAPS



The fictitious community of Flood County, USA, has been selected as a sample community for the purposes of this course.

The Flood Insurance Study and Flood Insurance Rate Map for Flood County provide opportunities to read and interpret the data in a typical flood insurance study and maps. This town provides examples of both coastal and riverine data and maps. The Flood Insurance Study and Maps can be ordered separately from the study guide and desk reference.

**Engineers Scale**. You should obtain a clear plastic engineer's scale or similar

measuring devise for use in several of the exercises in this study guide and for day-to-day implementation of your ordinance. A scale helps convert measurements on a map to distance on the ground.



# **LEARNING CHECKS**

Learning checks and unit learning exercises are included as Appendix H to help you master the material. Answers to the learning checks and exercises are included.

## C. Using the Study Guide

To administer a floodplain management program, you need to know about regulations and procedures under the National Flood Insurance Program. This study guide is designed to prepare you to serve as your community's floodplain management administrator.

As you can tell by the size of this volume and accompanying materials, you need to acquire a daunting amount of information. Most of what you need is covered in these pages, as this course is a comprehensive guide to the NFIP and your role as administrator.

By design, this study guide will help you learn. Key words and phrases appear with <u>underlines</u> and they are listed in the glossary in Appendix D. Each unit has frequent learning checks and a comprehensive review at the end. Be sure to do all of these – you learn best when you practice using the materials.

The study guide and desk reference does not have an index. However, each of the ten units covers a specific topic or area. At the beginning of each unit and at the beginning of the study guide are detailed Tables of Contents. You should be able to find where an issue is addressed in the study guide by scanning the Table of Contents.

#### WHERE TO GET HELP

For help in understanding any of the course content, contact your FEMA Regional Office or NFIP State Coordinator.

These offices are listed in Appendices A and B.

# D. ACKNOWLEDGMENTS

This study guide and desk reference is based on a home-study course that was developed through FEMA's Emergency Management Institute (EMI) dated March 1998. Although that course is not currently being offered by EMI, the course materials provided a wealth of information that has proved useful to local floodplain managers. For that reason, they have been updated and reformatted into a study guide and desk reference.

The home-study course on which this study guide and desk reference is based was prepared by French & Associates, Ltd., Park Forest, Illinois, under FEMA task order EME-97-SA-0424. It was adapted from a home study course created by FEMA Region IV for North Carolina, prepared by James M. Wright, Nancy B. Sidell, Christy King and Steven Randolph. That course in turn was based on materials from a resident course offered at the Emergency Management Institute, course E-273, Managing Floodplain Development through the National Flood Insurance Program.

Many individuals and organizations helped create the original home study course, particularly: Tom Boven and Tom Hirt, FEMA, EMI; Katie Hayden and Elizabeth Lemersal, FEMA Mitigation Directorate, Washington, D.C.; Prairie Wordsmiths, Urbana, Illinois (editing and design), and the NFIP State Coordinating Agencies from the following states who provided handbooks and publications that proved very helpful: Delaware, Illinois, Maine, Michigan, Minnesota, Missouri, North Carolina, Oklahoma, South Carolina, Washington, and Wisconsin.

The home-study course was converted to a study guide and desk reference and updated by FEMA staff in April 2004. At that time the study guide was thoroughly reviewed to ensure consistency with current NFIP regulations, procedures and policies. FEMA staff that participated in that effort include Mike Robinson, David Stearrett, and Bill Lesser with support from Don Beaton, Mark Crowell and Lois Forster. Michael Baker Jr., Inc. of Alexandria, Virginina prepared the document for publication.

Questions or comments on the study guide and desk reference should be sent to the Community Assistance Section, Risk Assessment Branch of FEMA's Mitigation Division.

#### Illustrations

Except as noted here, all illustrations are from FEMA or French & Associates. Special thanks to Dewberry & Davis for its support in preparing many of the figures.

Figure credits: 1-6: Managing Coastal Erosion, p. 31; 1-10: Landslide Loss Reduction, Colorado Geological Survey, 1989, p. 15; 1-14: Striking a Balance –

A Guide to Coastal Processes and Beach Management in Delaware, Delaware Department of Natural Resources and Environmental Control, 1985; 1-17: Roanoke Times and World News; 5-17 Berry A. Williams & Associates, Inc.; 6-3: Subdivision Design in Flood Hazard Areas, p. 19; 6-5: Planning for Hillside Development, p. 4; 6-6: Environmental Management: A Guide for Town Officials, Maine Department of Environmental Protection, 1992, p. 4.