

## **Introduction**

### **INT.1 Purpose and Scope of Document**

The Department of Homeland Security's Federal Emergency Management Agency (FEMA), as the agency responsible for administration of the National Flood Insurance Program (NFIP), conducts flood hazard studies and prepares Flood Hazard Maps and related products. Since its inception, FEMA has had primary responsibility for administering the NFIP in general, with a special emphasis on the identification and mapping of the nation's floodplains. FEMA undertook the identification and mapping activities to create a broad-based awareness of flood hazards and to provide the data necessary for community floodplain management programs and to actuarially rate flood insurance.

In the enabling legislation that created and amended the NFIP, FEMA has been authorized to consult with, receive information from, and enter into agreements or other arrangements with the head of any State, regional, or local agency in order to identify these floodplain areas. Therefore, FEMA has encouraged strong Federal, State, regional, and local partnerships for the purposes of reducing flood losses and disaster assistance.

Over the years, FEMA has established and implemented initiatives to build on Federal, State, regional, and local partnerships and, where appropriate, formalize the partnerships. Through these initiatives—including the two most recent efforts, the Cooperating Technical Partners (CTP) Program and Flood Map Modernization (Map Mod) program—FEMA and its State, regional, and local partners have improved cooperation in the flood hazard identification, risk assessment, and mapping processes. Many communities and the agencies that serve them have developed considerable technical capabilities and resources that provide the opportunity to improve and expand the collection, development, and evaluation of flood hazard data.

This Document Control Procedures Manual (hereinafter referred to as this Manual) has been prepared for use by staff of FEMA, the National Service Provider (NSP), and other appropriate Flood Hazard Mapping Partners for the processing of the standard and non-standard documents used in the following:

- FEMA-contracted studies/restudies;
- FEMA-initiated map revisions;
- Community-initiated map revisions;
- Conditional and final map revisions based on conditions other than fill;
- Conditional and final map revisions based on fill;
- Conditional and final map amendments;
- Letters of Determination Review; and
- Special conversions.

These products are processed under Parts 65, 67, 70, and 72 of the NFIP regulations. The Manual also provides procedures and sample documents for use in tracking community compliance and

documenting communities' entry into the NFIP. The Manual provides details on the procedures to be followed and the documents to be used for each NFIP map action.

## **INT.2 Organization of Document**

The Manual is organized in six sections and five appendices as discussed in Subsections INT.2.1 through INT.2.7. For the convenience of all Mapping Partners, a list of frequently encountered acronyms and abbreviations and a glossary of frequently encountered terms also have been included in this updated version of the Manual.

### **INT.2.1 Section 1**

Section 1 describes the procedures to be followed in processing new and revised Flood Insurance Study(FIS) reports; Flood Insurance Rate Maps (FIRMs)/Digital Flood Insurance Rate Maps (DFIRMs); and, when required, Flood Boundary and Floodway Maps (FBFMs). The new and revised FIS reports and maps are prepared to reflect the results of the following:

- FEMA-contracted Flood Map Projects;
- Community-initiated map revisions;
- Map revisions initiated by FEMA to incorporate revisions to Coastal Barrier Resources System and Otherwise Protected Area boundaries;
- Map revisions initiated by FEMA solely to correct an incorrect or omitted component (also referred to as “Notice-to-User Revisions”); and
- Flood Map Projects initiated by communities, regional agencies, and State agencies participating in the CTP Program.

Section 1 also describes procedures for processing appeals of the proposed or proposed modified Base Flood Elevation and base flood depth determinations resulting from Flood Map Projects and map revisions, and for processing protests of other flood hazard information shown in new or revised reports and on new or revised maps. Processing flowcharts are presented at the end of the section.

### **INT.2.2 Section 2**

Section 2 presents the procedures to be followed in processing requests for Conditional Letters of Map Revision Based on Conditions Other Than Fill (CLOMRs) and requests for Letters of Map Revision Based on Conditions Other Than Fill (LOMRs). Processing flowcharts are presented at the end of the section.

### **INT.2.3 Section 3**

Section 3 presents the procedures to be followed in processing requests for Conditional Letters of Map Amendment (CLOMAs), Letters of Map Amendment (LOMAs), Conditional Letters of Map Revision Based on Fill (CLOMR-Fs), Letters of Map Revision Based on Fill (LOMR-Fs), and Letters of Determination Review (LODRs). Processing flowcharts are presented at the end of the section.

## **INT.2.4 Section 4**

Section 4 presents detailed procedures for converting minimally floodprone and non-floodprone communities to the Regular Phase of the NFIP using special conversion procedures. Processing flowcharts are presented at the end of the section.

## **INT.2.5 Section 5**

Section 5 discusses the requirements for the review and processing of fees for conditional and final map revisions and conditional map amendments.

## **INT.2.6 Section 6**

Section 6 presents the standard procedures for tracking communities through the conversion/compliance process and preparing documentation for communities' entry into the Emergency and Regular Phases of the NFIP.

## **INT.2.7 Appendices**

Appendices A through E present descriptions and sample of the standard documents used in processing the products discussed in Sections 1 through 6 and are organized as follows:

- Appendix A— Study Reports and Maps;
- Appendix B— Conditional and Final Map Revisions Based on Conditions Other Than Fill;
- Appendix C— Conditional and Final Map Revisions Based on Fill, Conditional and Final Map Amendments, and Letters of Determination Review
- Appendix D— Special Conversions; and
- Appendix E— Conversion/Compliance Process and for Newly Eligible Communities.

## **INT.3 Authority**

This Manual supersedes the July 2000 version of the Manual and is to be used in conjunction with *Guidelines and Specifications for Flood Hazard Mapping Partners* (FEMA, 2003). If there is any conflict between the information presented herein and the information set forth in the NFIP regulations, as cited in Title 44, Chapter 1, Code of Federal Regulations (CFR), the NFIP regulations take precedence.

## **INT.4 Document Control and Maintenance Plan**

This Manual is a “living” document that will be updated whenever FEMA determines that changes to the product and processing requirements documented herein are appropriate. Periodically, as required, FEMA will post a new version of this Manual on the FEMA Flood Hazard Mapping Website at [http://www.fema.gov/plan/prevent/fhm/gs\\_main.shtm](http://www.fema.gov/plan/prevent/fhm/gs_main.shtm) as a collection of pdf and text files that mirror the structure of the six sections and five appendices.

FEMA Regional Office (RO) and Headquarters (National) Office staff will notify the NSP, other FEMA contractors, participants in the CTP Program (hereinafter referred to as CTPs), and other Mapping Partners when changes are made. Such changes may be frequent as FEMA proceeds with implementation of Map Mod. Therefore, FEMA encourages all Mapping Partners to remain familiar with, and cognizant of, FEMA's progress in completing planned Map Mod activities. Details on FEMA's implementation activities may be found on the FEMA Flood Hazard Mapping Website at [http://www.fema.gov/plan/prevent/fhm/mm\\_main.shtm](http://www.fema.gov/plan/prevent/fhm/mm_main.shtm).

Because this Manual is a living document, FEMA encourages interested parties to submit ideas for improving this Manual in writing. These written comments may be submitted electronically by sending an e-mail message to [FEMACG&S@floodmaps.net](mailto:FEMACG&S@floodmaps.net). Alternatively, they may be sent to the following address or transmitted by facsimile to the number provided:

Federal Emergency Management Agency  
Mitigation Division  
Risk Analysis Branch  
500 C Street, SW  
Washington, DC 20472  
Facsimile: 202-646-4596  
Attention: Max Yuan, FEMA Coordinator

## **INT.5 Overview of Flood Hazard Mapping Program**

For decades, the national response to flood disasters was generally limited to constructing flood-control works, such as dams, levees, and seawalls, and to providing disaster relief to flood victims. This approach did not reduce all monetary flood losses, nor did it discourage unwise development in the floodplain. To compound the problem, the public could not buy flood coverage from insurance companies, and building techniques to reduce flood damage were often overlooked.

Thus, it was in the face of mounting flood losses and escalating costs to the general taxpayer for disaster relief that the U.S. Congress created the NFIP with the passage of the National Flood Insurance Act of 1968. The NFIP was broadened and modified with the passage of the Flood Disaster Protection Act of 1973, the National Flood Insurance Reform Act of 1994, and other legislative measures, with the intent being to reduce future flood damage and provide an insurance mechanism that allows a premium to be paid for protection by those most in need of the protection.

The NFIP enables property owners in communities that choose to participate in the NFIP to insure structures against flood losses. The 1973 Act's mandatory flood insurance purchase requirements, which were expanded and strengthened in the 1994 Act, protect the financial interests of the lender, the borrower, and the taxpayer. Insurance coverage reduces reliance on Federal disaster assistance and also reduces the number of income tax write-offs for uninsured loans.

By employing sound floodplain management practices, officials and residents of a participating community can minimize the extent of the area requiring the mandatory purchase of flood insurance, and protect homes and businesses from much of the devastating financial losses

resulting from future flood disasters. More careful local management of floodplain development results in construction practices that can reduce flood losses and reduce the high costs associated with flood disasters.

To meet the community participation and flood hazard assessment objectives of the NFIP, the U.S. Congress assigned the following responsibilities to the Secretary of the U.S. Department of Housing and Urban Development:

...(1) identify and publish information with respect to all flood plain areas, including coastal areas located in the United States, which have special flood hazards, within five years following the date of the enactment of this Act, and (2) establish flood-risk zones in all such areas, and make estimates with respect to the rates of probable flood-caused loss for the various flood-risk zones for each of these areas, within fifteen years following each date.

Those responsibilities are now assigned to the Director of FEMA. For more than two decades as the administrator of the NFIP, FEMA has been engaged in a massive and unprecedented effort to identify and assess flood hazards and present flood hazard information on community-based mapping. The results to date have been impressive. FEMA has produced over 100,000 Flood Hazard Map panels for over 20,000 communities representing approximately 150,000 square miles of floodplain. The net effect of this work is that it has protected citizens' lives, properties, and personal finances by providing an insurance mechanism for those at risk and flood hazard data to minimize the flood risk for new and existing development.

The Flood Hazard Maps are referred to for each of the 15 million mortgage transactions each year and every time a community issues a building permit. Although originally developed to support the flood insurance and floodplain management activities associated with the NFIP, the Flood Hazard Maps are currently used by no fewer than nine distinct constituencies for a variety of applications, including disaster preparedness, response, and recovery; risk assessment; and diverse mitigation activities.

The Flood Hazard Maps are used daily by the following:

- **State and local floodplain managers, planners, and other officials** to establish and enforce minimum land-use and construction ordinances that comply with minimum NFIP standards;
- **Engineers** to consider the flood hazard when designing flood mitigation projects, such as structure elevations and relocations, buyouts, and culvert replacements;
- **Insurance companies and agents** to determine actuarial rates for flood insurance policies;
- **Lenders** to determine the flood hazard status of mortgaged properties at loan origination and throughout the life of the mortgages;
- **Real estate professionals and property owners** to determine the flood hazard status of properties;
- **Flood map determination firms** to specify the location of properties relative to the flood hazard area as well as provide other interpretive services for lenders;

- **Land development industry** to aid in designing developments that will be safe from flood hazards;
- **Surveyors** to prepare elevation certificates for structures; to prepare applications for Letters of Map Change, or “LOMCs;” and to collect the field data on which flood hazard studies are based; and
- **Federal, State, and local disaster and emergency response officials** to prepare for flooding disasters and issue warnings to those in danger of flooding and, after a flood has occurred, to implement emergency response activities and to aid in the rebuild and reconstruction process.

## **INT.6 Overview of Flood Hazard Mapping Products**

The NFIP objectives of flood hazard assessment and community participation have been achieved in two phases. The initial phase of community participation in the NFIP is referred to as the Emergency Phase; the Emergency Phase also may be referred to as the Emergency Program in some FEMA documents. The second phase of community participation is referred to as the Regular Phase; the Regular Phase also may be referred to as the Regular Program in some FEMA documents.

Information on the products that are produced and distributed by FEMA, its contractors, and other Mapping Partners during the Emergency and Regular Phases of the NFIP is provided in Subsections INT.6.1 and INT.6.2, respectively.

### **INT.6.1 Mapping Products Generated During Emergency Phase**

The first or “Emergency” Phase of community participation in the NFIP was designed to provide participating communities with a limited amount of insurance at federally subsidized rates until detailed evaluations of flood hazards in these communities could be performed. During the Emergency Phase, FEMA usually provides a community with a Flood Hazard Boundary Map (FHBM). The FHBM presents an approximate delineation of the Special Flood Hazard Areas (SFHAs) in the community. The SFHAs are the areas that would be inundated by the flood having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent-annual-chance flood is also referred to as the “base flood” or “100-year flood.”

If a community chooses to participate in the Emergency Phase of the NFIP, the community must adopt the FHBM and require permits for construction or other development in the SFHAs as shown on the FHBM.

### **INT.6.2 Mapping Products Generated During Regular Phase**

During the second phase of community participation in the NFIP—the “Regular” Phase—FEMA imposes more comprehensive floodplain management requirements on participating communities in exchange for higher amounts of insurance. Also, insurance for new and substantially improved structures is rated on an actuarial, or actual risk, basis. The insurance is based on flood insurance risk zones and elevations as determined by a detailed assessment of flood hazards and risk for the community.

The results of the initial detailed assessment, termed a Flood Insurance Study (FIS), were initially presented on a FIRM and, for some communities, on an FBFM. The results also were presented in a collateral FIS report, which provides supporting documentation for information presented on the FIRM and FBFM.

During the first decade of the NFIP, the FIRM and FBFM were prepared using traditional manual cartographic techniques. However, as the technology developed, FEMA has gradually transitioned to a digital environment. The mapping product that is produced using digital production techniques is the DFIRM. The data associated with the DFIRM are maintained in a Geographic Information System (GIS) or spatial database, which is referred to as the DFIRM Database.

In addition to the DFIRM products, FEMA is also creating Raster FIRMs. These Raster FIRMs are either created by scanning the manually produced FIRMs or as a by-product of the creation of DFIRMs.

Once the flood hazard data are generated, they are subject to various dynamic factors that affect their accuracy and, thus, their value as a tool for assessing flood risks for insurance and floodplain management purposes. These factors are as follows:

- Changes in development trends;
- Changes in hydrologic conditions;
- Changes in topographic conditions;
- Changes in flood hazard and risk assessment technologies and available data; and
- Discoveries of errors in existing analyses.

Therefore, since the early years of the NFIP, FEMA has performed restudies of hazards and coordinated with communities to revise or amend maps, reports, and other products in response to the dynamic factors listed above. Depending on the extent and impact of the revised flood hazard information, FEMA has physically revised and reissued the mapping products or has issued an alternative product, referred to as a Letter of Map Change (LOMC).

The LOMC has the same effect as a physical map update in that it documents a change to the effective FIRM, FBFM, and/or FIS report. However, because these products are not physically revised and republished, LOMCs generally take less time to process and are significantly less expensive for FEMA to complete.

Additional information on the mapping products discussed above is presented in Subsections INT.6.2.1 through INT.6.2.6.

### **INT.6.2.1 Flood Insurance Rate Map**

The FIRM is the insurance and floodplain management map produced by FEMA that identifies, based on detailed or approximate analyses, the areas subject to flooding during a 1-percent-annual-chance flood event in a community. Flood insurance risk zones, which are used to compute actuarial flood insurance rates, also are shown.

In areas studied by detailed analyses, the FIRM shows Base Flood Elevations (BFEs) to reflect the elevations of the 1-percent-annual-chance flood. For many communities, when detailed

analyses are performed, the FIRM also may show areas inundated by the 0.2-percent-annual-chance, or 500-year, flood and regulatory floodway areas.

Specific information on how the detailed analyses are to be performed, how floodplain and regulatory floodway boundaries are to be delineated, and how the BFEs and regulatory floodway are to be computed is provided in Volume 1 and related appendices in *Guidelines and Specifications for Flood Hazard Mapping Partners* (FEMA, 2003).

### **INT.6.2.2 Flood Boundary and Floodway Map**

The FBFM is the floodplain management map issued by FEMA that depicts, based on detailed flood hazard analyses, the boundaries of the 1-percent-annual-chance and the 0.2-percent-annual-chance floodplains and, when appropriate, the regulatory floodway. The FBFM does not show flood insurance risk zones or BFEs. (Note: Since the mid-1980s, FEMA has been incorporating information related to the regulatory floodway into the FIRM; however, numerous communities still have separately published FBFMs.)

### **INT.6.2.3 Flood Insurance Study Report**

The FIS report is a document, prepared and issued by FEMA, that documents the results of the detailed flood hazard assessment performed for a community. The primary components of the FIS report are text, data tables, photographs, and Flood Profiles. Specific information on the contents of the FIS report and how it is to be produced is provided in Appendix J of *Guidelines and Specifications for Flood Hazard Mapping Partners* (FEMA, 2003).

### **INT.6.2.4 Digital Flood Insurance Rate Map**

The DFIRM is a FIRM containing the information described in Subsection INT.6.2.1, prepared as a digital product. Creation of the DFIRM product may involve converting the existing manually produced FIRM to digital format. DFIRM products also may be created from new digital data sources using a GIS environment.

The DFIRM product allows for the creation of interactive, multihazard digital maps. Linkages are built into an associated database to allow users options to access the engineering backup material used to develop the DFIRM, such as hydrologic and hydraulic models, Flood Profiles, data tables, Digital Elevation Models, and structure-specific data, such as digital elevation certificates and digital photographs of bridges and culverts.

### **INT.6.2.5 Digital Flood Insurance Rate Map Spatial Database**

The objective of the DFIRM spatial database is to facilitate the collection, storage, processing, and distribution of data developed by FEMA. The DFIRM spatial database enables Mapping Partners to share the data necessary for the DFIRM production and conversion process. In addition, the database enables rapid map updates/revisions in the future.

Where possible, all mapping and engineering data elements are linked to physical geographic features and georeferenced. The use of a GIS as a component of the DFIRM spatial database provides the ability to georeference and overlay the mapping and engineering data. This allows the database to support a wide variety of existing and visionary FEMA engineering and mapping products.

### **INT.6.2.6 Raster Flood Maps**

The creation of raster FIRMs and FBFMs will allow FEMA and its map users to access the flood hazard information shown on the FIRM from electronic media, such as CD-ROMs, or via the Internet instead of printed and folded hardcopy (paper) maps. The raster FIRMs and FBFMs present the identical information shown on the printed maps in a more convenient format for computer users.

### **INT.6.2.7 Letters of Map Change**

A LOMC is a determination letter and associated document(s), prepared and issued by FEMA, that officially amends or revises an effective FHBM, FIRM, FBFM, FIS report, or DFIRM. LOMCs are issued in three forms:

- **LOMR-F**—A LOMR-F is an official **revision** of the effective NFIP map for a community. The LOMR-F provides FEMA’s determination as to whether a property (i.e., legally defined parcel of land or structure) has been elevated on fill above the BFE and is therefore outside the SFHA.
- **LOMR**—A LOMR also is an official **revision**, by letter, of an effective NFIP map. The LOMR product is issued by FEMA to change flood elevations, floodplain and regulatory floodway boundaries, and planimetric features.
- **LOMA**—A LOMA is an official **amendment** of the effective NFIP map for a community. The LOMA provides FEMA’s determination as to whether a property that is on natural ground has been inadvertently included in the SFHA shown on the map. The LOMA establishes the property’s location in relation to the SFHA.

Additional information on LOMC processes and related products is provided in Sections 2 and 3 of this Manual.

### **INT.6.2.8 Revalidation Letters**

To assist communities in maintaining the FIRM or DFIRM, FEMA developed a process for revalidating LOMCs automatically when a revised FIRM or DFIRM becomes effective, thereby superseding the LOMCs. The result of this process is a revalidation letter, termed a “LOMC-VALID letter.”

FEMA generally issues the LOMC-VALID letter approximately 2 weeks before the effective date of the revised FIRM, and the LOMC-VALID letter becomes effective 1 day after the effective date of the revised FIRM. The LOMC-VALID letter provides a list of all LOMCs on the revised FIRM panels that are revalidated, meaning that those LOMCs are still in effect for NFIP purposes.

Additional information on the LOMC-VALID letter is provided in Subsection 1.15 of this Manual.

### **INT.6.2.9 Letters of Determination Review**

As mandated by the National Flood Insurance Reform Act of 1994, FEMA developed a Standard Flood Hazard Determination Form that is to be used by all regulated lenders and Federal agency lenders that make flood hazard determinations for improved property used to secure loans. When a borrower disagrees with the information in the Standard Flood Hazard Determination form issued by the borrower and the borrower and lender cannot reach an agreement, the borrower and lender may request a determination from FEMA. The FEMA response to this type of request is a “Letter of Determination Review”, or “LODR.”

If sufficient information is provided, the written response from FEMA will indicate whether FEMA concurs or disagrees with the lender’s determination and whether the subject building is in the SFHA shown on the effective NFIP map. If sufficient information is not provided, the submitted information will be returned with a written response detailing the additional information FEMA would need to make a determination.

Additional information on LODR processing is provided in Subsection 3.4 of this Manual.

### **INT.6.2.10 Special Conversion Products**

The conversion of a community to the Regular Phase of the NFIP is usually accomplished through the publication of a FIRM for the community. However, for some newly identified communities and communities that are participating in the Emergency Phase of the NFIP, FEMA may take an alternative approach and use specially designed “Special Conversion” procedures. Under these Special Conversion procedures, FEMA may convert a community to the Regular Phase of the NFIP without performing a detailed flood hazard analysis and preparing a FIRM with detailed flood risk zones. Under these procedures, a community is converted, based on the recommendation of the FEMA RO, through either non-floodprone or minimally floodprone conversion procedures.

The products for non-floodprone and minimally floodprone communities are discussed below. An explanation of the terms “non-floodprone” and “minimally floodprone” and additional information on Special Conversion procedures is provided in Subsection INT.7.1.4 and in Section 4 of this Manual.

#### **Conversion Products for Non-Floodprone Communities**

Once a community has been approved for a non-floodprone conversion, FEMA sends the community Chief Executive Officer (CEO) and floodplain administrator a letter to effect the conversion. The content of the letter for a particular community will vary, depending on the community’s status in the NFIP and the existence of an FHBM.

#### **Conversion Products for Minimally Floodprone Communities**

If no changes are required within the SFHA shown on the effective FHBM, FEMA converts the community to the Regular Phase of the NFIP with a letter only. The letter informs the community that the FHBM is now a FIRM.

If the SFHA shown on the existing FHBM for a community must be revised, FEMA converts the community CEO and floodplain administrator with a FIRM that is an updated version of the

FHBM. Depending on the flooding situation in the community, FEMA prepares and prints one of the following:

- A FIRM that shows all SFHAs designated as Zone A;
- A FIRM Index that notes that all areas in the community are Zone D (used in cases where the FIRM is the community's initial map and all areas are considered remote and uninhabited); or
- A FIRM (one or more panels printed) that shows Zones A and X (unshaded) for the community's most populated areas and notes on the map Index that all unprinted panels are Zone D.

FEMA transmits Preliminary copies of the required map products to the community CEO) and floodplain administrator along with a transmittal letter that documents the floodprone status of the community.

## **INT.7 Overview of Flood Hazard Mapping Processes**

### **INT.7.1 FEMA-Funded Flood Map Projects and Update Activities**

To fulfill its mandate to identify floodprone areas nationwide, FEMA has an ongoing program to (1) develop new FIRMs or DFIRMs for floodprone communities that do not have them and (2) to produce updated FIRMs or DFIRMs for communities with existing FIRMs. Detailed information on the processes, guidelines, and specifications by which FEMA develops and updates FIRMs are provided in Volume 1 of *Guidelines and Specifications for Flood Hazard Mapping Partners* (FEMA, 2003) and in Section 1 of this Manual.

For the purposes of this Manual, all activities related to the flood hazard analyses performed for new or revised FIRMs are referred to as Flood Map Projects. However, these activities have until recently been categorized as one of the following:

- Flood Insurance Study;
- Flood Insurance Restudy;
- Limited Map Maintenance Program Revision;
- Existing Data Study;
- Existing Data Restudy;
- Special Conversion;
- Coastal Barrier Resources System Revision; or
- Notice-to-User Revision.

A more detailed description of each category of activities, as well as the revalidation process, is provided in Subsections INT.7.1.1 through INT.7.1.7.

#### **INT.7.1.1 Flood Insurance Studies and Restudies**

A "Flood Insurance Study," or "FIS," is the term used to describe the initial study of flood hazards performed for a community that does not have an effective FIRM. An FIS also has been referred to as a "Type 15 FIS" or a "Type 15 study."

A “Flood Insurance Restudy” or “RFIS” is the term used to describe a revised study of flood hazards performed for a community that already has an effective FIRM (and, in some cases, FBFM). An RFIS also has been referred to as a “Type 19 RFIS” or a “Type 19 restudy.”

FISs and RFISs have traditionally been performed by FEMA contractors.

### **INT.7.1.2 Limited Map Maintenance Program Project Revisions**

“Limited Map Maintenance Program project revision,” or “LMMP,” is the term used to describe a limited-scope restudy of flood hazards that generally involves a single community and one watercourse. The data submitted to FEMA for an LMMP were similar in format and level of detail to those submitted for an RFIS.

### **INT.7.1.3 Existing Data Studies and Restudies**

FEMA also prepared “Existing Data Studies,” or “XDSs,” for communities that do not have FIRMs using previously published flood hazard information. This flood hazard information comes from one of the following sources:

1. Reports prepared by Federal agencies for purposes other than the NFIP, such as Flood Hazard Analyses Reports (FHARs) and Floodplain Information reports (FPIs);
2. Other engineering reports prepared by Federal, State, or local agencies; or
3. FIS reports, FIRMs, and FBFMs issued by FEMA for adjacent communities (especially previously unincorporated areas of a county).

If FEMA used previously published information to prepare an initial or revised FIRM and FIS report for a community that is already participating in the Regular Phase of the NFIP without a FIRM, the product produced was referred to as an “Existing Data Restudy,” or “RXDS.”

### **INT.7.1.4 Special Conversions**

As mentioned earlier in this Introduction, FEMA may convert a community to the Regular Phase of the NFIP without preparing a FIRM with detailed flood risk zones. The exact process that is followed depends on whether FEMA determines the community is “non-floodprone” or “minimally floodprone.”

Non-floodprone communities are those communities that are determined by FEMA to not be subject to inundation by the 1-percent-annual-chance flood. The FEMA guidelines employed for determining whether a community is designated as non-floodprone are that all of its SFHAs are less than 200 feet wide and all drain less than 1 square mile, or physiographic features that preclude floodplain development exist in the community.

Minimally floodprone communities are those communities subject to inundation by the 1-percent-annual-chance flood, but for which existing conditions indicate that the area is unlikely to be developed in the foreseeable future. The criteria used by FEMA to evaluate a community’s development potential are presented below.

- Floodplains are publicly owned and designed for open space or preservation.

- Zoning laws, sanitary codes, subdivision regulations, shore land regulations, or community regulations effectively prohibit floodplain development.
- Surrounding land use or topography effectively limits the development potential.
- Population is decreasing or stable, and there is no foreseeable pressure for floodplain development.
- Floodplains are remote and uninhabited, and future development is unlikely.

Other indicators may be used in addition to these criteria to assess the development potential. One important indicator is the size of the undeveloped floodplain relative to the size of the entire community. The larger the proportion, the more the floodplain is likely to be subject to pressure for development.

### **INT.7.1.5 Coastal Barrier Resource System Revisions**

In cooperation with the U.S. Department of the Interior, FEMA transfers Coastal Barrier Resources System, or “CBRS,” boundaries to FIRMs or DFIRMs using congressionally adopted source maps. FIRMs or DFIRMs clearly depict the unique CBRS areas and their effective dates with special map notes and symbology. An important distinction to make between CBRS revisions and other types of map revisions is the community review component. Although FEMA shows CBRS areas on FIRMs or DFIRMs, the U.S. Congress is the only entity that may authorize a revision to CBRS boundaries; therefore, any requests for revisions to CBRS boundaries shown on FIRMs or DFIRMs must be addressed by the U.S. Fish and Wildlife Service and/or the U.S. Congress.

The revised CBRS boundaries are not a component of flood hazard analyses, and are not determined by FEMA. Additional information on CBRS revisions is provided in Section 1.18 of this Manual.

### **INT.7.1.6 Notice-To-User Revisions**

The intent of a Notice-To-User revision is to quickly and inexpensively correct a non-technical problem with a published FIS report, FIRM, DFIRM, or FBFM. These types of revisions are intended solely to correct a noted defect with the product and cannot be used to establish new or revised flood hazard information. The corrected components are sent to all individuals that previously received a copy of the product that contained the error or omission. A Notice-To-User letter signed by the FEMA PO is sent with the corrected portion of the FIS report, FIRM, DFIRM, and/or FBFM to provide a brief explanation of the revision. Additional information on Notice-To-User Revisions is provided in Subsection 1.19 of this Manual.

### **INT.7.1.7 Revalidations**

When a revised FIRM or DFIRM panel becomes effective, all previous LOMCs issued for that panel are superseded. Therefore, each time a FIRM or DFIRM panel is physically revised and republished, FEMA updates the panel to include the changes in flood hazard information resulting from previously issued map update actions, including LOMCs. Frequently, the results of a LOMC cannot be shown on a revised FIRM or DFIRM panel due to the limited size of the change contained in the LOMC or because the change is structure-specific.

The changes made to the effective FIRM or DFIRM via the LOMC process become effective without the affected panel(s) being physically revised and republished. Therefore, FEMA maintains records of these modifications so they may be incorporated into the next physical update of the affected FIRM panel(s), if the changes made by the LOMCs are of sufficient size to be mapped at the map scale. To assist communities in maintaining the FIRM or DFIRM, FEMA developed a process for revalidating LOMCs automatically when a revised FIRM becomes effective. The result of this process is the issuance of a LOMC-VALID letter.

The LOMC-VALID letter is considered legally binding, in the same manner as the original LOMC, provided a copy of the original LOMC determination letter or document accompanies the LOMC-VALID letter. If required by the requester, FEMA forwards a copy of the original LOMC determination letter or document with the LOMC-VALID letter. FEMA does not assess a fee for such requests.

Detailed information on processing procedures and requirements for revalidation letters is provided in Section 1.15 of this Manual.

## **INT.7.2 Community and Property Owner-Initiated Map Revisions**

Requests for map revisions may be submitted to FEMA by community officials or by individuals through their community officials in accordance with Part 65 of the NFIP regulations. These map revision requests generally involve changes to one or more of the following: (1) flood elevations, (2) flood risk zones, (3) floodplain boundaries, (4) regulatory floodway boundaries, and (5) corporate limits. These changes usually result from one or more of the following:

- Natural or manmade changes in the watershed or floodplain that affect flood hazards;
- Availability of new or more detailed topographic or flood information;
- Community annexations of floodprone areas; or
- Errors or discrepancies uncovered in the effective FIS report or map(s).

As discussed earlier in this Introduction, in response to such requests, FEMA may physically revise and reissue the FIS report and map(s) as a PMR. FEMA also may revise the FIS report and maps by issuing a LOMR documenting the changes to the FIS report and/or map(s).

### **INT.7.2.1 Physical Map Revisions**

FEMA generally initiate a PMR when:

- Changes resulting from the requested revision are extensive, affecting significant portions of a FIRM panel or multiple FIRM panels;
- Revision will add significant SFHAs to the effective FIRM; or
- Revision will result in an increase in the BFEs and/or regulatory floodway.

FEMA also may prepare a revised FIS report (and, under special circumstance, an FBFM), depending on the nature of the revision.

Requests for PMRs must be routed through the community CEO, or an official designated by the CEO, and sufficient supporting data and documentation must be submitted to satisfy the criteria described in Part 65 of the NFIP regulations. Detailed information on PMRs is provided in Section 1 of this Manual.

### **INT.7.2.2 Letters of Map Revision**

The FHBM, FIRM, or DFIRM can be revised by a LOMR-F when it is determined by FEMA that a legally defined parcel of land or structure has been elevated above the BFE based on the placement of earthen fill after the date of the first NFIP map. The LOMR-F request must be routed through the community CEO, or an official designated by the CEO, and sufficient supporting data and documentation must be submitted to satisfy the criteria described in Section 65.5 of the NFIP regulations. FEMA's issuance of a LOMR-F may revise the effective FHBM, FIRM, or DFIRM by removing the parcel of land or structure from the SFHA; however, LOMR-Fs should not be confused with LOMRs that make changes in BFEs, floodplain and floodway boundary delineations, and coastal high hazard areas.

Requests for LOMR-Fs may involve one or more properties (lots) or structures. Final determinations based on as-built data may be made for undeveloped lots totally filled above the BFE, portions of lots defined by metes and bounds and filled above the BFE, or for existing structure(s) on ground elevated by fill above the BFE.

Detailed information on processing procedures and requirements for LOMR-Fs is provided in Subsection 3.1 of this Manual.

FEMA may issue a LOMR to revise SFHAs, BFEs, or regulatory floodways on an effective FIRM, DFIRM, FBFM, and/or FIS report when the extent of the changes resulting from the requested revision are limited or when the request must be addressed quickly. However, FEMA typically does not issue a LOMR to add SFHAs to an effective FIRM, DFIRM, or FBFM or to increase BFEs. If the width of an SFHA increases, and the increase is contained entirely on the requester's property, FEMA may issue a LOMR.

FEMA prepares the LOMR using a standard format and provides a general description of the changes resulting from the requested revision. For most LOMRs, FEMA prepares and includes annotated copies of the affected Flood Profile, FIRM/DFIRM, and FBFM panels; Summary of Discharges Table; and Floodway Data Table, as appropriate. Although a revision accomplished by LOMR usually becomes effective on the date of the LOMR, the effective date may vary.

Detailed information on the processing procedures for LOMRs is provided in Section 2 of this Manual.

### **INT.7.3 Conditional Map Revisions**

Conditional Map Revision requests are those based on proposed alterations to the floodplain conditions within a community. A requester may choose to submit documentation that satisfies the criteria of Section 65.8 of the NFIP regulations and request that FEMA review and comment on the effect that a proposed project involving the placement of earthen fill within the SFHA will have on the SFHA designation for one or more legally defined parcels of land or one or more proposed structures. Conditional determinations also provide FEMA's comments as to whether the proposed project meets the minimum NFIP floodplain management criteria.

The FEMA reviews usually result in the issuance of a letter or determination document called a CLOMR-F. Detailed information on processing procedures and requirements for CLOMR-Fs is provided in Subsection 2 of this Manual.

A community or individual may request that FEMA review and comment on the effect of a proposed project on the flood hazards depicted on the effective FIRM, DFIRM, and/or FBFM for a community. In these cases, FEMA reviews the proposed project based on proposed construction drawings. These reviews usually result in the issuance of a letter or determination document called a CLOMR. The CLOMR describes the effect of the project, if constructed as proposed, on the effective FIRM, DFIRM, and/or FBFM. A CLOMR often contains detailed information on conditions that must be met by a requester before FEMA will issue a final determination regarding revising the FIS report, FIRM, DFIRM, and/or FBFM.

Detailed information on processing procedures and requirements for CLOMRs is provided in Section 2 of this Manual.

### **INT.7.4 Map Amendments**

Under the provisions of Part 70 of the NFIP regulations, a requester who believes that his or her property has been inadvertently included in an SFHA is allowed to substantiate this claim by requesting a LOMA. As mentioned earlier in this Introduction, a LOMA is an official determination by FEMA that a property has been inadvertently included in an SFHA as shown on an effective FHBM, FIRM, or DFIRM and is not subject to inundation by the 1-percent-annual-chance flood. Generally, the property is located on natural high ground at or above the BFE or on fill placed prior to the effective date of the first NFIP map designating the property as within an SFHA. Limitations of map scale and development of topographic data more accurately reflecting the existing ground elevations at the time the maps were prepared are the two most common bases for LOMA requests.

The result of such a request, if warranted, is an amendment to the currently effective FHBM, FIRM, or DFIRM. Requests for such determinations generally are submitted by the owners of the affected property or others having an insurable interest in properties that may have been included in the SFHA. LOMAs eliminate the Federal requirement for the purchase of flood insurance. It remains the lending institution's prerogative, however, to require or waive the insurance purchase requirement.

LOMA requests may involve one or more properties (lots) and one or more structures. Final determinations, based on existing conditions, may be made for undeveloped lots or for existing structures.

Detailed information on processing procedures and requirements for LOMAs is provided in Subsection 3.2 of this Manual.

### **INT.7.5 Conditional Map Amendments**

Under Part 70 of the NFIP regulations, a requester who believes his or her structure, when constructed on natural ground at or above the BFE, will be outside the SFHA, may request a conditional determination from FEMA. The FEMA response is usually a CLOMA. CLOMAs provide FEMA's comment on whether the structure, if built as proposed, would be in the SFHA. CLOMAs may not be issued for unimproved or undeveloped property. Detailed information on processing procedures and requirements for CLOMAs is provided in Subsection 3.2 of this Manual.

## **INT.7.6 Corporate Limit Change Requests**

FEMA receives a considerable number of requests from communities to have their NFIP maps updated to reflect corporate limit changes based on recent annexations or de-annexations. To accommodate these requests, FEMA developed a standard procedure for processing these requests. Using this procedure, processing decisions are made based on the following factors: (1) status of map for annexing community, (2) existence of flood hazard information for annexed area, (3) source of flood hazard information, and (4) effect of annexation on community participation in the NFIP.

Depending on the decision made, FEMA will take one of the following actions:

- Send a letter to the annexing community indicating the revision will not be made at this time because the flood hazard information has not changed.
- Issue a LOMR or multiple LOMRs as appropriate to revise the affected map panel(s) for both the annexing and de-annexing communities.
- Physically update and re-issue affected FIRM or DFIRM panel(s) for both the annexing and de-annexing communities.
- Create new FIRMs or DFIRMs for communities that do not have FIRMs when necessary to meet NFIP regulations.
- Send a memorandum to the FEMA RO staff requesting additional guidance and coordination with the community (when the annexed area is covered by an effective or rescinded FHBM or by a rescinded FIRM).

Detailed information on processing procedures and requirements for corporate limit changes annexation requests is provided in Subsection 1.21 of this Manual.

## **INT.7.7 Letters of Determination Review**

When a borrower disagrees with the Standard Flood Hazard Determination made by the lender and the borrower and lender cannot reach an agreement, the borrower and lender may request a determination from FEMA. The FEMA response to such requests is a LODR.

If sufficient information is provided, the written response from FEMA will indicate FEMA's concurrence or disagreement with the lender's determination and whether the subject building is in the SFHA shown on the effective NFIP map. If sufficient information is not provided, FEMA will return the submitted information with a written response indicating the additional information to be submitted.

Detailed information on processing procedures and requirements for LODR requests is provided in Subsection 3.4 of this Manual.

## **INT.8 Overview of Mapping Formats**

FEMA uses two basic formats in presenting FHBMs, FIRMs, DFIRMs, and FBFMs—Flat Map and Z-Fold Map. Although they are discussed separately below, the Standard, Map Initiatives, and Countywide Formats are subsets of the Flat Map and Z-Fold Map Formats. Graphic representations of Flood Hazard Maps prepared in these formats are provided in Appendix K of *Guidelines and Specifications for Flood Hazard Mapping Partners* (FEMA, 2003).

### **INT.8.1 Flat Map Format**

For the Flat Map Format, the panels are produced as 11" x 17" pages that are formatted and printed in a booklet form. If more than one panel is required to cover a community, FEMA prepares a cover sheet that includes an index and legend. FEMA used the Flat Map Format primarily to prepare FHBMs; however, FEMA also prepared some FIRMs in this format. FEMA has not, and will not, prepare DFIRMs or FBFMs in this format. FEMA has, for the most part, discontinued the Flat Map Format and plans to convert the remaining inventory to Z-Fold Format as countywide DFIRMs are created.

### **INT.8.2 Z-Fold Map Format**

For the Z-Fold Map Format, FEMA produces one or more map panels in a folded format similar to that used for road maps. FEMA shows a Legend on each printed panel. If more than one panel is required to cover a community, FEMA prepares an index, either in Z-Fold Format or as an accompanying 8.5" x 11" document. (See Appendix K of *Guidelines and Specifications for Flood Hazard Mapping Partners* (FEMA, 2003) for further details.)

FEMA has historically used the Z-Fold Map format to produce many FHBMs; most FIRMs; all FBFMs; and, most recently, all DFIRMs.

### **INT.8.3 Standard Format**

Until 1985, FEMA produced and published separate FIRMs and FBFMs. This is referred to as the Standard Format for FEMA maps. Generally speaking, FEMA only produced separate FBFMs if (1) regulatory floodways were computed, so they had to be shown on the map, or (2) if separate FBFMs were required by State regulations even if FEMA did not compute or delineate a regulatory floodway.

### **INT.8.4 Map Initiatives Format**

Starting in 1986, FEMA began preparing FIRMs in its Map Initiatives Format. For FIRMs prepared in the Map Initiatives Format, FEMA combined all essential information previously shown on the separately published FIRM and FBFM into a FIRM. At this same time, FEMA instituted some additional format changes to make the FIRM more user-friendly and useable. These changes included simplifying the flood insurance rate zone designations for SFHAs developed based on detailed flood hazard assessments and providing a new cross-hatching feature to identify regulatory floodway areas.

### **INT.8.5 Countywide Format**

At about the same time that FEMA instituted the Map Initiatives Format, FEMA also instituted its Countywide Format to enable seamless flood hazard coverage at the county level. For FIRMs prepared in the Countywide Format, FEMA compiles the effective flood hazard information for all jurisdictions within the subject county (both unincorporated and incorporated areas) and produces one FIRM and one FIS report. For FIRMs prepared in Countywide Format, FEMA included all essential information that previously appeared on the effective FIRMs and FBFMs

for the individual communities, unless that information had been superseded by a restudy or map revision.

## **INT.9 Overview of Mapping Partners**

To provide a sound basis for floodplain management and insurance rating, the Flood Hazard Maps must present flood hazard information that is correct and up to date. Maintaining correct and up-to-date flood hazard information requires the combined contributions of many Mapping Partners.

The following are the primary Mapping Partners involved in the development and maintenance of the Flood Hazard Maps and other flood hazard and risk information used for NFIP purposes:

- FEMA RO staff;
- FEMA Headquarters Office staff;
- Community officials;
- Regional agency officials;
- State agency officials;
- Communities, regional agencies, and State agencies participating in the CTP Program;
- Other Federal agencies;
- FEMA contractors;
- Contractors for communities, regional agencies, and State agencies; and
- Community residents and property owners.

Brief descriptions of each of the primary groups of Mapping Partners as well as other constituent groups that have an interest in the accuracy of the flood hazard information are provided in Subsections INT.9.1 through INT.9.9.

### **INT.9.1 FEMA Regional Offices**

FEMA has offices in each of 10 Regions. The locations of these offices and the States, Commonwealths, and Territories that they cover are presented below.

- **Region I**, located in Boston, oversees flood hazard mapping and floodplain management activities in Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.
- **Region II**, located in New York City, oversees flood hazard mapping and floodplain management activities in New Jersey, New York, Puerto Rico, and the U.S. Virgin Islands.
- **Region III**, located in Philadelphia, oversees flood hazard mapping and floodplain management activities in Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia.
- **Region IV**, located in Atlanta, oversees flood hazard mapping and floodplain management activities in Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.

- **Region V**, located in Chicago, oversees flood hazard mapping and floodplain management activities in Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.
- **Region VI**, located in Denton, Texas, oversees flood hazard mapping and floodplain management activities in Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.
- **Region VII**, located in Kansas City, oversees flood hazard mapping and floodplain management activities in Iowa, Kansas, Missouri, and Nebraska.
- **Region VIII**, located in Denver, oversees flood hazard mapping and floodplain management activities in Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.
- **Region IX**, located in Oakland, oversees flood hazard mapping and floodplain management activities in Arizona, California, Hawaii, Nevada, Guam, American Samoa, and the Northern Mariana Islands.
- **Region X**, located in Bothell, Washington, oversees flood hazard mapping and floodplain management activities in Alaska, Idaho, Oregon, and Washington.

## **INT.9.2 FEMA Headquarters Office**

The FEMA Headquarters, or National, Office is located in Washington, DC. The Mitigation Division is the office within FEMA that oversees flood insurance, flood hazard mapping, and floodplain management activities nationwide. The branches within the Mitigation Division that carry out these responsibilities are the Risk Insurance Branch, Risk Analysis Branch, and Risk Reduction Branch, respectively.

## **INT.9.3 Community Officials**

Many community officials have active roles in the process of creating and maintaining Flood Hazard Maps, implementing floodplain management ordinances, and ensuring wise floodplain development. The community officials who work most closely with FEMA and other Mapping Partners are the CEOs, floodplain managers, and community planners.

## **INT.9.4 Regional Agency Officials**

The regional agencies that have active roles in the process of creating and maintaining Flood Hazard Maps, implementing floodplain management ordinances, and ensuring wise floodplain development are watershed management districts, flood control districts, regional planning councils, councils of governments, and regional offices of State agencies.

## **INT.9.5 State, Commonwealth, and Territory Officials**

Many State, Commonwealth, and Territory agencies are actively involved in creating and maintaining Flood Hazard Maps, implementing floodplain management ordinances, and ensuring wise floodplain development. The most active agency in each is referred to as the “State NFIP Coordinator,” or “State Coordinating Agency,” for that state, commonwealth, or territory. The State NFIP Coordinators in each FEMA Region are listed below.

**Region I**

Connecticut Department of Environmental Protection  
Maine State Planning Office  
Massachusetts Department of Flood Hazard Management Programs  
New Hampshire Office of Emergency Management  
Rhode Island Emergency Management Agency  
Vermont Department of Environmental Conservation

**Region II**

New Jersey Department of Environmental Protection  
New York State Department of Environmental Conservation  
Puerto Rico Planning Board  
U.S. Virgin Islands Department of Planning and Natural Resources

**Region III**

Delaware Department of Natural Resources  
District of Columbia Environmental Health Administration  
Maryland Emergency Management Agency  
Pennsylvania Department of Community and Economic Development  
Virginia Department of Conservation  
West Virginia Office of Emergency Services

**Region IV**

Alabama Emergency Management Agency  
Florida Division of Emergency Management  
Georgia Department of Natural Resources  
Kentucky Division of Water Resources  
Mississippi Emergency Management Agency  
North Carolina Division of Emergency Management  
South Carolina Department of Natural Resources  
Tennessee Department of Economic and Community Development

**Region V**

Illinois Department of Natural Resources  
Indiana Department of Natural Resources  
Michigan Department of Environmental Quality  
Minnesota Department of Natural Resources  
Ohio Department of Natural Resources  
Wisconsin Department of Natural Resources

**Region VI**

Arkansas Soil and Water Conservation Commission  
Louisiana Department of Transportation and Development  
New Mexico Department of Public Safety  
Oklahoma Water Resource Board  
Texas Natural Resources and Conservation Commission

**Region VII**

Iowa Department of Natural Resources  
Kansas Department of Agriculture, Division of Natural Resources  
Missouri Emergency Management Agency  
Nebraska Natural Resources Commission

**Region VIII**

Colorado Water Conservation Board  
Montana Department of Natural Resources and Conservation  
North Dakota State Water Commission  
South Dakota Division of Emergency Management  
Utah Division of Comprehensive Emergency Management  
Wyoming Emergency Management Agency

**Region IX**

Arizona Department of Water Resources  
California Department of Water Resources  
Hawaii Department of Land and Natural Resources  
Nevada Division of Water Planning  
Guam Department of Public Works  
American Samoa Economic Development Planning Office  
Northern Mariana Islands Building Safety Division

**Region X**

Alaska Department of Community and Economic Development  
Idaho Department of Water Resources  
Oregon Department of Land Conservation and Development  
Washington State Department of Ecology

**INT.9.6 Participants in Cooperating Technical Partners Program**

One of the key objectives of the FEMA Map Mod program is to increase local involvement in, and ownership of, the flood mapping process. To meet this objective, FEMA developed and implemented the CTP Program. FEMA has identified the following beneficial reasons for partnering with State, local, and regional organizations to produce NFIP maps:

- The data used for local permitting and planning will also be the basis for the NFIP map, facilitating more efficient floodplain management.
- The CTP Program provides the opportunity to modify a national program to interject a tailored, local focus where unique conditions may exist that necessitate special approaches to flood hazard identification.
- The partnership mechanism provides the opportunity to pool resources and extend the productivity of limited public funds.

In support of the CTP Program, FEMA has committed to the following:

- To recognize the contributions made by FEMA's State, regional, and local community Partners by providing timely and accurate flood hazard information;
- To maximize the use of Partners' contributions as a means of leveraging limited public funds to the fullest extent possible while maintaining essential NFIP standards;
- To fully integrate contributing Partners into the flood hazard data development process, with the corresponding authorities and responsibilities;
- To provide training and technical assistance to Partners when appropriate; and
- To facilitate mentoring to increase capabilities of both existing and potential Partners.

The CTP Program allows communities as well as regional agencies and State, Commonwealth, and Territory agencies that have the interest and capability to become active partners in the FEMA Flood Hazard Mapping Program. FEMA and its Partners administer activities under the CTP Program through close and frequent coordination and through formal agreements.

More detailed information on these agreements and eligible mapping activities is provided in the portion of the FEMA Flood Hazard Mapping Website dedicated to the CTP Program at [http://www.fema.gov/plan/prevent/fhm/ctp\\_main.shtm](http://www.fema.gov/plan/prevent/fhm/ctp_main.shtm).

## **INT.9.7 Other Federal Agencies**

Five Federal agencies have been actively involved in the NFIP since its inception, and have worked closely with FEMA in performing flood hazard studies and preparing Flood Hazard Maps. These agencies are as follows:

- U.S. Army Corps of Engineers (USACE);
- U.S. Geological Survey (USGS);
- Natural Resources Conservation Service (NRCS), which was formerly the U.S. Soil Conservation Service);
- U.S. Bureau of Reclamation (BuRec); and
- Tennessee Valley Authority (TVA).

These agencies also often provide FEMA with copies of reports (e.g., FPIs, FHARs) and other information that was developed for purposes other than the NFIP for FEMA use in updating the Flood Hazard Maps for affected communities.

In accordance with Paragraph 65.10(e) of the NFIP regulations, a Federal agency with responsibility for levee design may certify that a levee has been adequately designed and constructed to provide protection from the 1-percent-annual-chance flood. Therefore, the USACE and other Federal agencies may be involved in a flood hazard study/restudy or map revision even when they are not contracted with FEMA to perform the hydrologic and hydraulic analyses.

FEMA works closely with the National Geodetic Survey, which is the part of the National Oceanic and Atmospheric Administration that maintains a network of more than 750,000 precisely located monumented reference points nationwide. The NGS national reference

network and Global Positioning System photogrammetry provide a universal set of coordinates across community, county, and State lines. FEMA requires such a foundation of accurate coordinates for the Flood Hazard Maps.

FEMA works closely with, and provides technical assistance to, the U.S. Fish and Wildlife Service to improve the mapping of CBRS areas. Specifically, FEMA assists the U.S. Fish and Wildlife Service in producing digital, vector mapping that is suitable for direct incorporation as a thematic layer in Digital FIRMs and potential posting on a Website. As requested by the U.S. Congress, FEMA uses the mapping developed by the Service to present CBRS areas and related information of the Flood Hazard Maps for affected communities.

FEMA has established a partnership with the USGS through the National Digital Orthophoto Partnership Program. Through this Program, the USGS will produce Digital Orthophoto Quadrangle maps for those communities where no community base map that meets FEMA base map specifications exists. FEMA will then use the information to update the Flood Hazard Maps.

FEMA is an active participant in the National Digital Elevation Program, which was established to promote the exchange of digital elevation data and technology among government, private-sector, and academic communities and to establish standards and guidance that will benefit all agencies and users.

FEMA also is working cooperatively with 16 other Federal agencies participating on the Federal Geographic Data Committee (FGDC). The FGDC is developing the National Spatial Data Infrastructure, which encompasses policies, standards, and procedures for organizations to cooperatively produce and share geographic data.

## **INT.9.8 FEMA Contractors**

The primary FEMA contractors that assist FEMA and the other Mapping Partners in creating and maintaining Flood Hazard Maps and implementing floodplain management ordinances and their traditional roles and responsibilities are summarized in Subsections INT.9.8.1 through INT.9.8.3.

### **INT.9.8.1 Indefinite Delivery Indefinite Quantity Contractors**

The “Indefinite Delivery Indefinite Quantity contractors” or “IDIQs,” formerly referred to as “Study Contractors,” are the private-sector architectural/engineering firms and Federal agencies that perform flood hazard studies and restudies under contract to, or through Interagency Agreement (Federal agencies) with FEMA. The Federal agencies that have performed flood hazard studies and restudies for FEMA are the USACE, USGS, NRCS, BuRec, and TVA.

### **INT.9.8.2 National Service Provider**

The NSP is the team of private-sector architectural/engineering firms and other specialty firms that: (1) reviews and processes Flood Map Projects; (2) reviews and processes conditional and final map revisions and map amendments; (3) prepares Preliminary copies and final reproduction materials for DFIRMs, FIS reports, and related products; (4) provides program management, development, and implementation support to FEMA and other Mapping Partners; and (5) maintains archives of flood hazard data.

### **INT.9.8.3 Map Service Center Contractor**

The Map Service Center Contractor is a private-sector firm that maintains the FEMA Flood Hazard Mapping inventory and related products, distributes printed copies of Flood Hazard Maps and related products, and provides customer service support to FEMA and other Mapping Partners.

### **INT.9.9 Contractors for Communities and Regional Agencies**

To expand their resources or to complete a specific short- or long-term mapping-related project, communities and regional agencies may hire contractors to provide a variety of engineering and mapping services. These contractors may be private-sector firms or public-sector agencies (Federal, State, and regional) with specific experience, knowledge, or capability.

### **INT.9.10 Contractors for State/Commonwealth/Territory Agencies**

To expand their resources or to complete a specific short- or long-term mapping-related project, State, Commonwealth, and Territory agencies may hire contractors to provide a variety of engineering and mapping services. These contractors may be private-sector firms or public-sector agencies (Federal, State, and regional) with specific experience, knowledge, or capability.

### **INT.9.11 Community Residents and Property Owners**

Community residents and property owners play an active role in creating and maintaining Flood Hazard Maps by providing community officials, FEMA, and their contractors with historical and property-specific information during the preparation of a new or revised Flood Hazard Map; by providing property- or area-specific technical support data to community officials and FEMA for use in revising or amending Flood Hazard Maps; and by notifying community officials and FEMA of potential violations of local floodplain management and development ordinances.

### **INT.9.12 Other Program Constituents**

Other Program constituents that may play lesser, but nonetheless important roles in the process of creating and maintaining Flood Hazard Maps, implementing floodplain management ordinances, and ensuring wise floodplain development and management are the following:

- U.S. Congress;
- Insurance companies and agents;
- Lenders;
- Real estate professionals;
- Flood map determination firms;
- Land development industry;
- Surveyors; and
- Federal, State, and local disaster and emergency response officials.

Several organizations that represent state and local officials, the nation's realtors, home builders, and surveyors, and those with a stake in floodplain management, development review, disaster mitigation, emergency response, land-use planning, and environmental protection, have joined to

form the Mapping Coalition. The Mapping Coalition was formed to support the FEMA Map Mod activities and take an active part in assuring that the Flood Hazard Maps are accurate. The following organizations are members of this coalition:

- American Congress of Surveying and Mapping;
- American Planning Association;
- American Public Works Association;
- American Society of Civil Engineers;
- Association of State Floodplain Managers;
- Association of State Wetland Managers;
- Coastal States Organization;
- National Association of Counties;
- National Association of Development Organizations;
- National Association of Flood and Stormwater Management Agencies;
- National Association of Home Builders;
- National Association of Realtors,
- National Emergency Management Association;
- National League of Cities;
- National Flood Determination Association; and
- National Lenders Insurance Council.

The National Wildlife Federation and the Western Governors Association also have publicly supported Map Mod.