

Chapter 1

Introduction

The Federal Emergency Management Agency, or “FEMA,” has designed this *Guide* to provide community officials, planners, engineers, and other interested parties with information about how to request changes to the flood hazard and risk information presented on National Flood Insurance Program, or “NFIP”, maps and associated products. FEMA is the agency within the Department of Homeland Security, or “DHS,” that is responsible for administration of the NFIP. In this capacity, FEMA identifies flood hazards, assesses flood risks, and provides appropriate flood hazard and risk information to communities nationwide.

Before entering the Emergency and Regular Phases of the NFIP, a community must, if it has not already done so, adopt and enforce floodplain management regulations that are aimed at reducing future flood losses. These floodplain management regulations are to meet or exceed the minimum standards of the NFIP as documented in the NFIP regulations.

This *Guide* is one of many new or updated guidance documents issued by FEMA as part of its ongoing massive and unprecedented effort to modernize NFIP flood maps nationwide. The goal of this *Guide* is to provide general information about the following:

- An approach to be followed in determining the type of map change needed;

- The various processes available for submitting map change requests; and
- The types of supporting data that must be submitted to FEMA for review and evaluation before a change may be made.

To enhance readers’ understanding of how the NFIP maps were created, background information about the NFIP, including the regulations and procedures under which requests for changes are handled by FEMA, also has been provided in this *Guide*.

1.1 Background on National Flood Insurance Program

In the face of mounting flood losses and escalating costs to the general taxpayer, the U.S. Congress established the NFIP on August 1, 1968, with the passage of the National Flood Insurance Act of 1968 (Public Law 90-448). The U.S. Congress broadened and modified the NFIP with the passage of the Flood Disaster Protection Act of 1973 (Public Law 93-234), and other legislative measures. It was further modified and reformed by the National Flood Insurance Reform Act of 1994 (Public Law 103-325) and the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004 (Public Law 108-264).

The NFIP is a Federal program enabling property owners in participating communities to purchase insurance protection against losses from flooding. The program is designed to provide an insurance alternative to disaster

assistance to meet the escalating costs of repairing damage to buildings and their contents caused by floods.

Participation in the NFIP is based on an agreement between local communities and the Federal Government. This agreement states that if a community will adopt and enforce a floodplain management ordinance to reduce future flood risks to new construction in high-risk areas known as Special Flood Hazard Areas, or “SFHAs,” the Federal Government will make flood insurance available within the community as a financial protection against flood losses.

The NFIP was designed to benefit both individual property owners and communities. It enables property owners to purchase flood insurance at reasonable rates, and it assists communities by requiring that they adopt and administer local floodplain management measures aimed at protecting lives and new construction from future flooding. Any community that has the authority to adopt, administer, and enforce floodplain management regulations can participate in the NFIP. “Community” is defined in Section 59.1 of the NFIP regulations as “...any State or area or political subdivision thereof, or any Indian tribe or authorized tribal organization, or Alaska Native village or authorized native organization....”

Communities that participate in the NFIP do so in two phases, referred to as “the Emergency Phase” and “the Regular Phase.” In communities participating in the initial phase of the NFIP, the Emergency Phase, limited amounts of flood insurance are available

to local property owners. In communities participating in the Regular Phase, full flood insurance coverage is available. More information on each participation phase is provided below.

The NFIP regulations, which define responsibilities and requirements for FEMA, State NFIP Coordinators, other mapping partners, and participating communities, are set forth in the Code of Federal Regulations (CFR) at Title 44, Chapter I, Parts 59-77. The regulations are available for viewing or download through the following page on the U.S. Government Printing Office (GPO) Website:

http://www.access.gpo.gov/nara/cfr/waisidx_08/44cfrv1_08.html

The regulations are also accessible through the “Guidance Documents and Other Published Resources” page on the FEMA Website, which is located at http://www.fema.gov/plan/prevent/fhm/fm_docs.shtm. This *Guide* and many other useful FEMA guidance documents also are accessible through the “Guidance Documents and Other Published Resources” page and other pages within the Flood Hazard Mapping, or “FHM”, portion of the FEMA Website.

Additional information on the Emergency and Regular Phases is provided below. Individuals who are interested in learning more about the history of the NFIP should read *Answers to Questions About the NFIP* (MitDiv-2), the document titled “National Flood Insurance Program Description,” and other resources accessible through the Flood Insurance

portion of the FEMA Website. The Flood Insurance home page is located at <http://www.fema.gov/business/nfip/index.shtm>.

1.2 Emergency Phase

Under the Emergency Phase of the NFIP—also often referred to as “the Emergency Program”—FEMA issued Flood Hazard Boundary Maps, or “FHBMs”, for more than 19,000 floodprone communities nationwide. The FHBMs provided approximate delineations of the SFHAs, which are the areas subject to inundation by the “base flood.” The base flood is the flood that has a 1-percent chance of being equaled or exceeded in any given year and has been adopted as a regulatory standard by Federal agencies, and most States, for use in the administration of floodplain management programs. The base flood also has been referred to as the “1-percent-annual-chance flood” or “100-year flood.”

The boundaries of the SFHAs shown on FHBMs were based on one or more of the following:

- Information about past floods;
- Regional flood depth/drainage area relationships;
- Flood maps published by other Federal agencies, and
- Simplified hydrologic and hydraulic calculations.

Generally speaking, FEMA did not perform detailed engineering analyses or field surveys when preparing the FHBMs. As a result, the flood zone boundaries shown are considered

“approximate,” and the flood insurance risk zone designation for these SFHAs is Zone A.

Less than 1 percent of the 20,000+ communities participating in the NFIP participate in the Emergency Phase of the NFIP. As flood hazard information and mapping are updated and the NFIP maps are modernized, FEMA works with communities that are Emergency Phase participants to help them become Regular Phase participants.

The milestones that a community and FEMA had to meet for a community to become a participant in the Emergency Phase of the NFIP are summarized in Figure 1-1. FEMA no longer produces FHBMs. FEMA will bring newly identified communities into the Regular Phase of the NFIP using one of the conversion processes discussed below.

1.3 Regular Phase

At some point after an FHBM was produced, printed, distributed, and became effective for a community, FEMA worked with community officials to convert the community to the Regular Phase of the NFIP, thereby increasing the amount of flood insurance available to property owners. For most communities, FEMA applied its “regular conversion process.” For other communities, FEMA applied its “special conversion” process.” For still other communities, FEMA used hazard and risk data that were produced for purposes other than the NFIP to create the NFIP map(s) and FIS report for a community (e.g., U.S. Army Corps of Engineers, or “USACE”, Floodplain Information reports, Natural Resources Conservation Service, or “NRCS”, Flood Hazard Analyses reports).

Information on each of these processes information found on NFIP flood maps and accompanying FIS reports, and

flood map formats are summarized below.

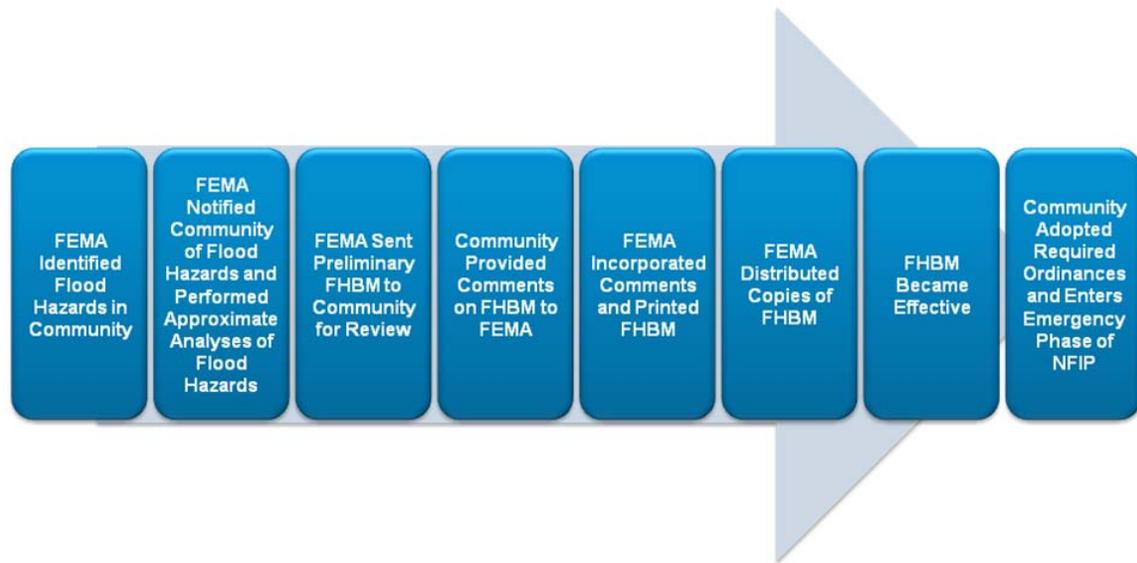


Figure 1-1. Milestones for Participation in Emergency Phase of NFIP

1.3.1 Regular Conversion Process

For communities converted to the Regular Phase of the NFIP using the regular conversion process, FEMA conducted engineering studies to determine the flood hazards and risks in that community. These engineering studies have been referred to as “Flood Insurance Studies”, or “FISs”, or as “studies/mapping projects.”

FEMA usually used some combination of detailed and approximate methods in performing these studies/mapping projects. As a result of these studies/mapping projects, FEMA refined the approximate SFHA boundaries shown on the FHBM and/or developed new flood hazard and risk information.

FEMA usually provided the following to a community as a result of a detailed study/ mapping project:

- Base (1-percent-annual-chance) Flood Elevations (BFEs), which may be presented as either water-surface elevations referenced to the National Geodetic Vertical Datum of 1929 (NGVD29) or the North American Vertical Datum of 1988 (NAVD88) or average depths of flow in feet above the ground surface;
- 10-percent-annual-chance (10-year), 2-percent-annual-chance (50-year), and 0.2-percent-annual-chance (500-year) flood water-surface elevations;

- Boundaries of the regulatory floodway, which is defined as the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the entire base (1-percent-annual-chance) flood discharge can be conveyed with no greater than a 1.0-foot increase in the BFE;
- 1-percent-annual-chance (100-year) and 0.2-percent-annual-chance (500-year) flood zone boundaries; and
- Flood insurance risk zones with appropriate zone designations.

FEMA presented the results of the study/mapping project on a Flood Insurance Rate Map, or “FIRM”, and, usually, in an accompanying FIS report. In some cases, FEMA also presented the results of a study/mapping project on a separate map, called a Flood Boundary and Floodway Map, or “FBFM.”

The FIRM depicted 1- and 0.2-percent-annual-chance flood zone boundaries; flood insurance risk zones; BFEs and/or base flood depths; and, where appropriate, regulatory floodway boundaries and other information related to the regulatory floodway. In those cases where an FBFM was produced, it depicted only the 1- and 0.2-percent-annual-chance flood zone boundaries; the regulatory floodway boundaries, and other information related to the regulatory floodway.

The FIS report provided background information about the community or communities that were the focus of the study/mapping project; described the

flooding sources and the engineering analyses performed as part of the study/mapping project; and provided tables and figures (photographs, charts) that presented the study/mapping project results. Sample FIS report materials are provided in Appendix J of the previously referenced *Guidelines and Specifications for Flood Hazard Mapping Partners*. A FEMA-produced online tutorial on how to read an FIS report is accessible through the following page on the FEMA Website:

http://www.fema.gov/plan/prevent/fhm/ot_fisr.shtm

As mentioned earlier, the information presented on the FIRM and in the FIS report frequently was the result of detailed engineering analyses performed as part of a study/mapping project. Those analyses included hydrologic analyses that yield flood discharge-frequency relationships and hydraulic analyses that yield computed flood elevations and depths.

The hydrologic analyses usually involved the use of statistical analyses of recorded stream gage data, regional discharge-drainage area relationships, or rainfall-runoff models. FEMA considered the following factors when determining whether a previously performed hydrologic analysis could be used for a new study/mapping project:

- Changes in land use in the watershed;
- Publication of new regional regression equations by the U.S. Geological Survey;
- Changes in design storm data by the National Weather Service;

- Increase in length of stream record;
- Construction of flood-control structures by Federal agencies such as the USACE, Natural Resources Conservation Service (NRCS), or U.S. Bureau of Reclamation; and
- Construction of flood-control structures by local organizations (e.g., water management districts, irrigation districts).

For riverine flooding sources, the hydraulic analyses usually involved backwater computations or other hydraulic computations that were based on the computed flood discharges and the results of field surveys. Special techniques were used for the analysis of coastal flooding, alluvial fan flooding, ice-jam flooding, and shallow flooding. The following factors that affect hydraulic conditions are considered:

- New bridges and culverts;
- Changes in stream morphology through natural processes (e.g., stream migration, erosion, deposition) or through manmade changes (e.g., channelization, stream widening, stream straightening, dredging); and
- Construction of flood-control structures (e.g., levee systems, diversion channels).

Interested readers will find additional information on the engineering studies that are performed in Volume 1 and the appendixes in the previously referenced *Guidelines and Specifications for Flood Hazard Mapping Partners*. The quick guide in Table 1-1 will help readers

locate the appropriate appendix from this document.

For some communities, the 1- and 0.2-percent-annual-chance flood zone boundaries and the regulatory floodway boundaries also were shown on a separate FBFM, which was published as an exhibit in the FIS report. However, for most FEMA studies/mapping projects initiated since January 1, 1985, FEMA has not prepared FBFMs, and the flood hazard and risk information, including the regulatory floodway, has been shown on the FIRM.

As part of the ongoing modernization effort, FEMA—with the support of FEMA contractors, CTPs, and other mapping partners—has been producing modernized flood maps, which are referred to as Digital Flood Insurance Rate Maps (DFIRMs.) A flood map is considered “modernized” when the old paper version of the effective NFIP map(s)—that is, the FHBM, FIRM, or FBFM—is replaced by the new digital map product, the DFIRM. The DFIRMs are created, stored, and ultimately distributed in an electronic environment.

The process of modernizing a map requires transferring and/or replacing all of the data that is found on the paper maps (FIRM, FBFM, and FHBM) into a digital database that is used to produce the DFIRM. The digital data used to create a DFIRM includes topographic data that show the ground elevations;

Table 1-1. Quick Guide to Guidelines and Specifications Appendices

Type of Flood Hazard	Relevant Appendix
Riverine Flooding	Appendix C – Guidance for Riverine Flooding Analyses and Mapping
Coastal Flooding	Appendix D – Guidance for Coastal Flooding Analyses and Mapping
Shallow Flooding	Appendix E – Guidance for Shallow Flooding Analyses and Mapping
Ice Jam Flooding	Appendix F – Guidance for Ice-Jam Analyses and Mapping
Alluvial Fan Flooding	Appendix G - Guidance for Alluvial Fan Flooding Analyses and Mapping
Flooding in Areas Impacted by Levee Systems	Appendix H – Guidance for Mapping of Areas Protected by Levee Systems

base map data that include street locations, community boundaries, and other map information; and hydrologic and hydraulic data (engineering analyses) that depict stream shape and size and are used to determine the flood zone boundaries.

To view sample FIRM panels and to learn more about the features of these products, interested parties should view the FEMA-produced online tutorial on how to read a FIRM, which is accessible through the following page on the FEMA Website:

http://www.fema.gov/plan/prevent/fhm/ot_firmr.shtm.

To learn more about the components of the FIS report, interested parties are encouraged to view the online tutorial accessible through the following page on the FEMA Website:

http://www.fema.gov/plan/prevent/fhm/ot_fi_sr.shtm.

To learn more about the DFIRM and DFIRM Database and to view samples of these products, interested parties are encouraged to visit the “Digital Products” page on the FEMA Website

http://www.fema.gov/plan/prevent/fhm/dfm_dfhm.shtm or view one of the three tutorials provided on http://www.fema.gov/plan/prevent/fhm/ot_main.shtm.

The milestones that the community and FEMA had to meet to allow the community to participate in the Regular Phase of the NFIP when a detailed study had been performed are summarized in Figure 1-2.

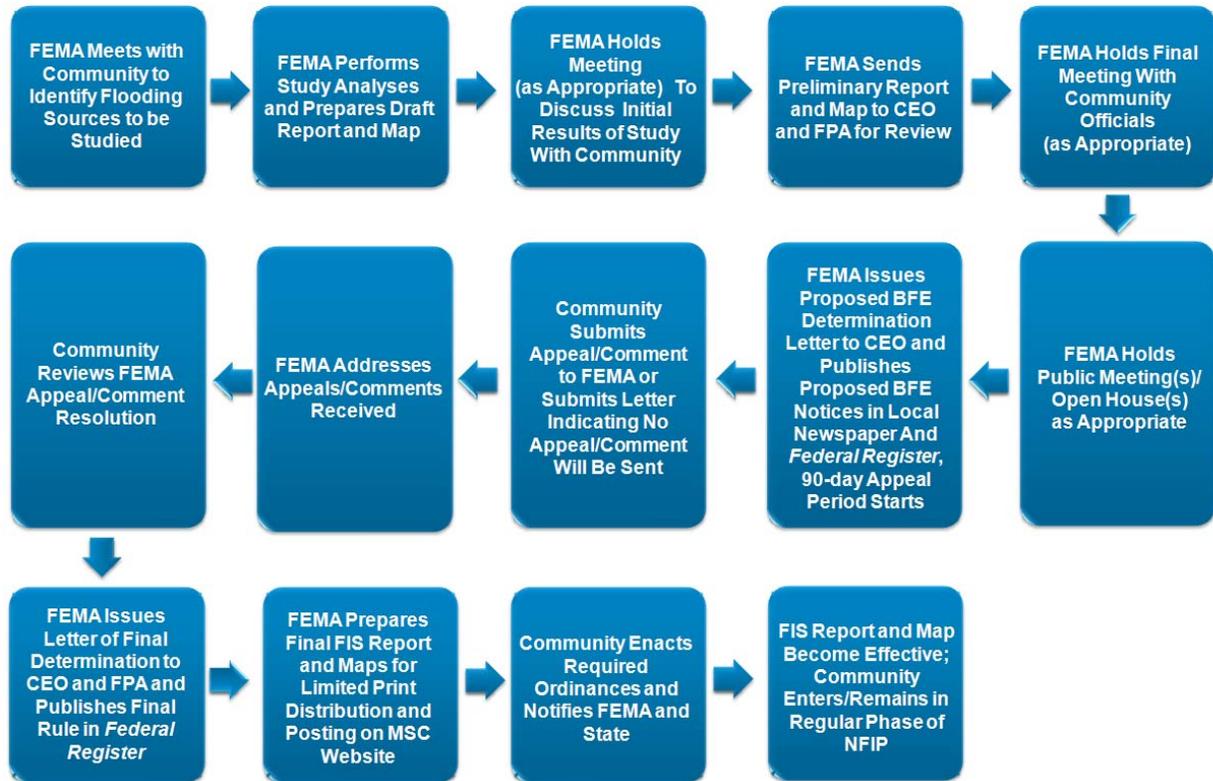


Figure 1-2. Milestones for Participation in Regular Phase of NFIP

1.3.2 Special Conversion Process

For some communities, FEMA created an entire FIRM directly from an FHBM. In such cases, FEMA did not perform detailed engineering analyses. Such FIRMs do not present the detailed flood hazard and risk information usually shown on FIRMs, but they do provide SFHAs without BFEs and enable the mapped community to participate in the Regular Phase of the NFIP.

For some communities, FEMA did not create a FIRM. In such cases, involving communities with minimal or no flood hazard and low potential for future development, FEMA converted the communities to the Regular Phase of the

NFIP by issuing a letter. In the letter, FEMA notified the community that (1) the FHBM has been converted to a FIRM, and information shown on the previously published FHBM should be used, or (2) the community is not subject to inundation by the base (1-percent-annual-chance) flood and no SFHAs have been shown.

In other cases, FEMA determined that, while the flood hazards in the community are minimal, conditions within the community had changed since the FHBM was published and distributed and the areas designated as SFHAs had changed. In such cases, FEMA provided the community with a FIRM showing the new or revised SFHAs.

The procedures used by FEMA to convert communities to the Regular Phases of the NFIP without performing a detailed engineering study are referred to as “special conversion procedures.” Interested readers can obtain additional information on special conversion procedures from Volume 2, Section 2.9 of *Guidelines and Specifications for Flood Hazard Mapping Partners* and in Section 4 of FEMA’s *Document Control Procedures Manual*, both of which are accessible through the following page on the FEMA Website:

<http://www.fema.gov/plan/prevent/fhm/gsmain.shtm>.

1.3.3 Existing Data Studies

In still other cases, FEMA used hazard and risk data that were produced for purposes other than the NFIP to create the FIRM, FBFM (if an FBFM was warranted), and FIS report for a community (e.g., USACE Floodplain Information reports, NRCS Flood Hazard Analyses reports). For these “existing data studies”, the maps and report are processed in the same manner as FEMA-contracted studies/mapping projects.

1.4 Flood Hazard and Risk Information Shown on Flood Maps

The high-risk SFHAs that are identified and mapped through the use of detailed engineering analyses are assigned “detailed” flood insurance risk zone designations. For most communities, the

flood insurance risk zone designations used on the FIRM or DFIRM were Zone AO, Zone AH, Zones A1-A30 (for older FIRMs), or Zone AE.

For coastal communities in which coastal high hazard areas have been identified, the additional flood insurance risk zone designations used on the FIRM or DFIRM were Zones V1-V30 (for older FIRMs) or Zone VE. Coastal high hazard areas are defined as areas of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high-velocity wave actions from storms or seismic sources. A primary frontal dune is defined as a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves during major coastal storms.

For a much smaller group of communities, still other flood insurance risk zone designations were used on the FIRM or DFIRM because a flood protection system—usually, a levee system—was being constructed or restored to reduce the flood risk associated with a 1-percent-annual-chance flood. These flood insurance risk zone designations were Zone A99, Zone AR/AE, Zone AR/AH, Zone AR/A0, and Zone AR/A1-30 (for older FIRMs). For all of these SFHAs, the mandatory flood insurance purchase requirements of the NFIP apply.

To learn more about the flood insurance requirements of the NFIP, interested readers should visit the previously referenced Flood Insurance home page, which is located at <http://www.fema.gov/business/nfip/index.shtm>.

The FIRM or DFIRM may also depict approximate SFHAs, which may have been taken directly from an effective FHBM, an existing data study performed for purposes other than the NFIP, or developed as part of the study/mapping project performed by or for FEMA. Detailed hydraulic analyses were not performed for these areas; therefore, no BFEs or base flood depths are shown on the FIRM or DFIRM.

The mandatory flood insurance purchase requirements of the NFIP also apply to these areas, which have been designated as Zone A or Zone A/AR on the FIRM or DFIRM.

1.5 Flood Map Formats

The format of the NFIP flood maps for different communities also may be different. Some of the older FIRMs were prepared in an 11-inch by 17-inch format; however, most FIRMs were prepared in a larger, accordion-fold, or Z-fold, format. Likewise, most of the older FIRMs were produced in a “community-based” format where only one community or jurisdiction was shown.

Since the mid-1990s, more and more FIRMs have been produced in the FEMA Countywide Format, in which all incorporated and unincorporated areas of an entire county, parish, or division are

shown. The FEMA countywide format is the format used for the vast majority of the DFIRMs.

1.6 Additional Flood Map Information

Additional information about the various types of NFIP flood maps—FHBMs, FIRMs, FBFMs, and DFIRMs—that are now in effect is provided in the previously referenced *Guidelines and Specifications for Flood Hazard Mapping Partners* and *Guide to Flood Maps* (FEMA 258). To assist users in reading and using the FIRM, DFIRM, FIS report, and related products, FEMA also has developed online tutorials and made them available through the following page on the FEMA Website:

http://www.fema.gov/plan/prevent/fhm/ot_main.shtm

Information about how to obtain copies of *Guidelines and Specifications for Flood Hazard Mapping Partners*, FEMA 258, other FEMA publications, and the online tutorials is provided in Appendix B of this *Guide*.

1.7 Why Supporting Data and Documentation Are Needed

The flood hazard and risk information presented on the NFIP flood maps and in the FIS reports that accompany them forms the technical basis for the administration of the NFIP. As discussed earlier in this *Guide*, FEMA uses the information to establish actuarial rates for flood insurance policies.

Communities that participate in the

NFIP use the information to develop the floodplain management ordinances required for participation in the NFIP.

Individuals who are interested in learning more about the floodplain management requirements of the NFIP should consult the previously referenced “National Flood Insurance Program Description” document and the resources that are accessible through the “Floodplain Management” portion of the FEMA Website. The Floodplain Management home page is located at <http://www.fema.gov/plan/prevent/floodplain/index.shtm>.

One recent estimate indicates that the flood maps are referred to approximately 30 million times each year, including during each mortgage-related transaction 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 maps are currently used by no fewer than nine distinct stakeholder and user groups for a variety of applications, including disaster preparedness, response, and recovery; risk assessment; and diverse mitigation activities. These groups are listed below.

1. **State and local floodplain administrators, planners, and other officials** use the maps to establish and enforce minimum land-use and construction ordinances that comply with minimum NFIP standards.
2. **Engineers** consider the flood hazard information on the maps when designing flood mitigation projects, such as structure elevations and relocations, buyouts, and culvert replacements.
3. **Insurance companies and agents** use the maps to determine actuarial rates for flood insurance policies.
4. **Lenders** use the maps to determine the flood hazard status of mortgaged properties at loan origination and throughout the life of the mortgages.
5. **Real estate professionals and property owners** use the maps to determine the flood hazard status of properties.
6. **Flood zone determination firms** use the maps to specify the location of properties relative to the SFHA as well as provide other interpretive services for lenders.
7. **Land development industry** use maps to aid in designing developments that will be safe from flood hazards.
8. **Surveyors** use the maps to prepare Elevation Certificates for structures; to apply for Letters of Map Change, or “LOMCs;” and to collect the field data on which flood hazard studies are based.
9. **Federal, State, and local disaster and emergency response officials** use the maps 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 rebuilding and reconstruction process.

Because of the importance of that information, FEMA exercises great care to ensure that (1) the analytical methods employed in performing the engineering studies or restudies are scientifically and technically correct; (2) the engineering procedures followed meet professional standards; and (3) the results of the studies/mapping projects are accurately depicted on the flood map(s) and in the FIS report.

Although the NFIP flood maps and FIS reports are prepared according to rigorous technical standards, FEMA recognizes that changes to the maps and reports may be necessary. Some reasons for changes are improvements in the techniques used in assessing flood hazards, changes in physical conditions in floodplains or watersheds, and the availability of new scientific or technical data. In addition, the limitations imposed by the scales at which the NFIP maps are prepared may result in individual properties being inadvertently included in SFHAs.

Therefore, the NFIP regulations allow FEMA to revise and amend NFIP maps and FIS reports, as warranted, at its discretion or after it receives requests from community officials and/or individual property owners. Indeed, to help FEMA ensure that the maps and reports present information that accurately reflects existing flood hazards, the NFIP regulations (as cited at Section 65.3) require that each NFIP participating community inform FEMA of any physical changes that affect BFEs

in the community and, within 6 months of the date that such data are available, submit those data that show the effects of those changes.

In making revisions and amendments, FEMA must adhere to the same engineering standards applied in the preparation of the preliminary or final effective versions of the flood maps and reports. Therefore, when requesting changes to the flood maps and reports, community officials, property owners, and other requesters working through community officials are required to submit adequate supporting data and documentation.

The supporting data and documentation, which are described in the following chapters and in the NFIP regulations, enable FEMA to review and evaluate the map change requests and to carry out its responsibility of ensuring that the flood hazard and risk information presented is scientifically and technically correct. Over the years, the majority of community requests for such changes have been found to be warranted, but FEMA cannot and will not make changes without adequate supporting data and documentation.

1.8 Map Change Processes

The following terms describe NFIP map change processes discussed in this *Guide*:

- **Appeal**—An appeal is a formal objection to proposed or proposed modified BFEs or base flood depths, submitted by a community official or an owner

or lessee of real property within the community through the community officials during the statutory 90-day appeal period. An appeal must be based on data that show the proposed or proposed modified BFEs are scientifically or technically incorrect.

- **Comment**—A comment (formerly referred to as a protest) is an objection to or comment on any information, other than proposed BFEs or base flood depths, shown on an NFIP map that is submitted by community officials or interested citizens through the community officials during the 90-day appeal period.
- **Map Revision**—A map revision is a change to an effective NFIP map that is accomplished by a Physical Map Revision, or “PMR”, or by a Letter of Map Revision, or “LOMR.” The effective NFIP map for a community is the latest map issued by FEMA for that community. NFIP maps, including the BFEs, base flood depths, regulatory floodways, and other flood hazard information that they may contain, become effective after they are published and distributed. The effective date is shown in the title block of each panel of the map and may be labeled as “Effective Date,” “Revised,” or “Map Revised.”

When a map revision is warranted, FEMA will either

revise and republish the affected map panels (and, if necessary, the FIS report) to show the appropriate changes—this is a PMR—or will issue LOMR determination documents, which describe the changes and officially revise the effective NFIP map. A LOMR can be issued to change BFEs, base flood depths, flood zone and regulatory floodway boundary delineations, and coastal high hazard areas.

If a map revision request is based solely on the placement of earthen fill, the FEMA response is a Letter of Map Revision Based on Fill, or “LOMR-F.” LOMR and LOMR-F determination documents officially revise the effective NFIP map and, if appropriate, FIS report materials.

- **Conditional Map Revision**—A conditional map revision is a response to a request that FEMA determine whether a **proposed** project, such as installation of a hydraulic structure, would warrant a revision to an effective NFIP map after the project is completed. A proposed structural modification could consist of a proposed floodplain modification project or simply the proposed placement of fill for the elevation of one or more structures or parcels of land. The FEMA comments on such requests are referred to as “conditional determinations.”

When such conditional determinations are warranted, they are issued in the form of Conditional Letters of Map Revision, or “CLOMRs”, or Conditional Letters of Map Revision Based on Fill, or “CLOMR-Fs.” The CLOMR and CLOMR-F determination documents describe the effect(s) that the proposed structural modification project or proposed fill would have on the effective NFIP map. CLOMR and CLOMR-F determination documents **do not** officially revise the effective NFIP map panels.

- **Map Amendment**—A map amendment is a change to an effective NFIP map that results in the removal of the SFHA designation from an individual structure or legally defined parcel of land that has been inadvertently included in the SFHA; that is, no alterations of topography have occurred since the date of the first NFIP map that showed the structure or parcel to be within the SFHA. When FEMA determines that one or more structure(s) or parcel(s) of land have been inadvertently included in the SFHA, FEMA issues a Letter of Map Amendment, or “LOMA.” The LOMA determination documents officially amend the effective NFIP map panel(s) for the area in which the structure(s) and/or

legally defined parcel(s) are located.

- **Conditional Map Amendment**—A conditional map amendment is a response to a request that FEMA determine whether a proposed structure, if built as planned on a legally defined parcel of land that is on natural ground or fill placed prior to the first NFIP map showing that area to be in an SFHA, would be excluded from the SFHA as shown on the effective NFIP map. When FEMA makes such a determination, it issues Conditional Letter of Map Amendment, or “CLOMA”, determination documents. The CLOMA determination documents do not officially amend the effective NFIP map panel(s).
- **Letter of Determination Review**—In accordance with a mandate issued by the U.S. Congress in the National Flood Insurance Reform Act of 1994 (42 U.S.C. 4012a(e)(3)), FEMA accepts and processes requests for its review of determinations of whether buildings or manufactured homes are located in identified SFHAs.

The result of this review, referred to as a Letter of Determination Review, or “LODR”, provides borrowers and lenders with information to resolve disputes regarding in/out determinations made by the lenders. LODRs **do not** officially amend or revise the

effective NFIP map panel(s) used to make the determination.

The terms defined above refer not only to types of changes to NFIP maps and reports, but also to the processes under which FEMA will address requests for such changes. Chapter 2 of this *Guide* should help requesters determine which process or processes to apply to particular map change requests. The remaining chapters discuss the scientific and technical data and other documentation that must be submitted to support the various types of map change requests and describe the procedures by which such map changes are made.

1.9 Application Forms and Processing Fees

On October 1, 1992, FEMA implemented the use of detailed application forms and instructions for requesting revisions or amendments to NFIP maps. These forms and instructions were implemented for two reasons.

1. The forms and instructions provide a step-by-step process for requesters to follow and are comprehensive; therefore, requesters are assured of providing all of the necessary information to support their requests without having to go through an iterative process of providing additional information in a piecemeal fashion. Experience has shown this to be a time-consuming and cost-intensive process.

2. The forms and instructions help to assure that requesters' submittals are complete and more logically structured; therefore, FEMA can complete its review of the requests in a shorter timeframe and at a lesser cost to the NFIP.

While completion of the forms may appear to be burdensome, FEMA believes it is prudent to do so because of the advantages that result for the requester. Details on the application forms and instructions to be used are provided in Chapters 4 through 7 of this *Guide*. Information on how to obtain copies of the forms is provided in each chapter and in Appendix B of this *Guide*.

On October 1, 1992, FEMA also implemented changes to Part 72 of the NFIP regulations to allow FEMA to establish and implement review and processing fees for most types of conditional and final map amendment and map revision requests. FEMA implemented the fee-charge system to reduce the expenses to the NFIP by more fully recovering the costs associated with processing conditional and final map change requests.

Additional information on the fee-charge system, including information on the current fee schedule, is provided in Appendix D and in Chapters 4 through 7 of this *Guide*.