



Federal Emergency Management Agency

Washington, D.C. 20472

(Originally Issued December 20, 2002)

MEMORANDUM FOR: Regional Mitigation Division Directors
Regions I – X

FROM: Doug Bellomo, Director
Risk Analysis Division

SUBJECT: Revised Procedure Memorandum No. 29 – Maintenance and Control of the *Guidelines and Specifications for Flood Hazard Mapping Partners*

Background: FEMA developed the *Guidelines and Specifications for Flood Hazard Mapping Partners (Guidelines)* in February 2002. The *Guidelines* define the technical requirements and product specifications for flood hazard maps and related National Flood Insurance Program (NFIP) products, as well as associated coordination and documentation activities. The *Guidelines* were prepared to reflect revised flood hazard mapping processes resulting from FEMA's Map Modernization Program and to incorporate specification and guidance documents into one web-provided document for use by mapping partners and stakeholders. The *Guidelines*, which were updated in April 2003, were prepared by FEMA in cooperation with Mapping Partners and flood hazard mapping stakeholders.

Issue: A document control and maintenance plan which outlined an orderly review of changes and a process for annual review and revision was originally issued on December 20, 2002 in Procedure Memorandum 29. However, since the last update of the *Guidelines* in 2003, FEMA consolidated the support functions previously provided by three Map Coordination Contractors into one contract with the Mapping on Demand (MOD) team as the National Service Provider. Therefore, the guidance provided in the earlier version of the memorandum is out of date and no longer applies.

Action Taken: FEMA has updated the plan to maintain and control the *Guidelines*. The updated plan in the attachment also provides guidance on the Procedure Memorandum creation process and establishes the connection between Procedure Memorandums and the *Guidelines*. This plan must be followed by FEMA and its designee in updating the *Guidelines* and creating procedure memorandums.

cc: See distribution list

Distribution List (electronic distribution only)



Guidelines and Specifications for Flood Hazard Mapping Partners

Document Maintenance and Control Plan

ATTACHMENT

1.0 Purpose and Scope

The purpose of this plan is to specify the protocol to be followed in the maintenance and document control of the Federal Emergency Management Agency (FEMA) *Guidelines and Specifications for Flood Hazard Mapping Partners (Guidelines)*. These protocols are intended to ensure that proposed changes to the *Guidelines* are identified, reviewed, and approved in a systematic way; that approved changes are posted and communicated in a timely manner; and that current versions of the *Guidelines* are accessible to Flood Hazard Mapping Partners.

This plan also specifies the review and approval process for FEMA Procedure Memorandums as they often contain new or revised guidance and/or specifications that affect the *Guidelines* contents.

2.0 Process Overview

The *Guidelines* and Procedure Memorandums provide specific requirements to Mapping Partners involved in the FEMA Flood Hazard Mapping program. A “Guidelines Team” consisting of FEMA Technical Leads within the Risk Analysis Division and/or key subject matter experts from FEMA Regions and FEMA’s contractors shall work collaboratively to produce and review *Guidelines* changes and procedure memorandums that affect the content of the *Guidelines*. Final documents must be approved by the FEMA Risk Analysis Division Director.

Revisions to the *Guidelines* and/or new Procedure Memorandums may be identified by FEMA Headquarters (HQ) and Regional Office (RO) staff; FEMA HQ contractor staff; Indefinite Delivery/Indefinite Quantity contractors (IDIQs); CTP Program participants and their contractors; other State, regional, and community partners; and users and other flood hazard mapping stakeholders.

Changes to the *Guidelines* may be initiated in several ways, including but not limited to the following:

- A Procedure Memorandum detailing a new or revised procedure that requires changing the *Guidelines*. Changes documented in Procedure Memorandums may range from rule changes to graphic specifications. Not all Procedure Memorandums necessitate changing the *Guidelines*.
- Identification of new specifications and/or procedures by FEMA HQ or RO staff, IDIQs, CTP program participants and/or their contractors, or FEMA HQ contractors.
- Availability of new technology that changes the production protocols for Flood Hazard Maps and related National Flood Insurance Program (NFIP) products.
- Infrastructure changes within the NFIP requiring associated changes in programmatic or administrative support services.
- Request for changes to the *Guidelines* from various partners, stakeholders, and users; and

3.0 Document Maintenance and Control Procedure

Changes to the *Guidelines* must be conducted on an as needed basis depending on the need for updates and the availability of funding. The following subsections address maintenance, the collaborative review process used to create Procedure Memorandums and revise the *Guidelines*, the



Guidelines and Specifications for Flood Hazard Mapping Partners

Document Maintenance and Control Plan

approval and distribution protocol for the new and/or revised components, and the document control protocol.

3.1 *Guidelines Maintenance*

New or revised guidelines, standards, procedures, or other guidance may be documented in a Procedure Memorandum or other document produced by FEMA and may also result in a change to the *Guidelines*. When appropriate, teams comprised of subject matter experts from FEMA, contractors, CTP program participants, and other mapping partners and stakeholders may be formed to review required changes in guidelines, standards, procedures, and other guidance. The changes resulting from these teams' activities may be documented in a Procedure Memorandum, other guidance document, or revised portions of the *Guidelines*.

Figure 1 shows the process flow for revising the *Guidelines* and creating new Procedure Memorandums. For changes requiring an immediate update to specific components of the *Guidelines*, the procedure memorandum process must be used for implementation of the changes to those components.

3.1.1 *Interim Guidelines Updates*

Updates to the *Guidelines* and new Procedure Memorandums will be prepared in an ongoing fashion as warranted. For changes requiring an immediate update to specific components, interim revisions will be performed throughout the year. To facilitate ongoing document control, the *Guidelines* will be formatted to enable users to identify the most recent revision date for each primary section (e.g., 1.2) and each subsection (e.g., 1.2.1). See Section 3.4 of this plan for more details.



Document Maintenance and Control Plan

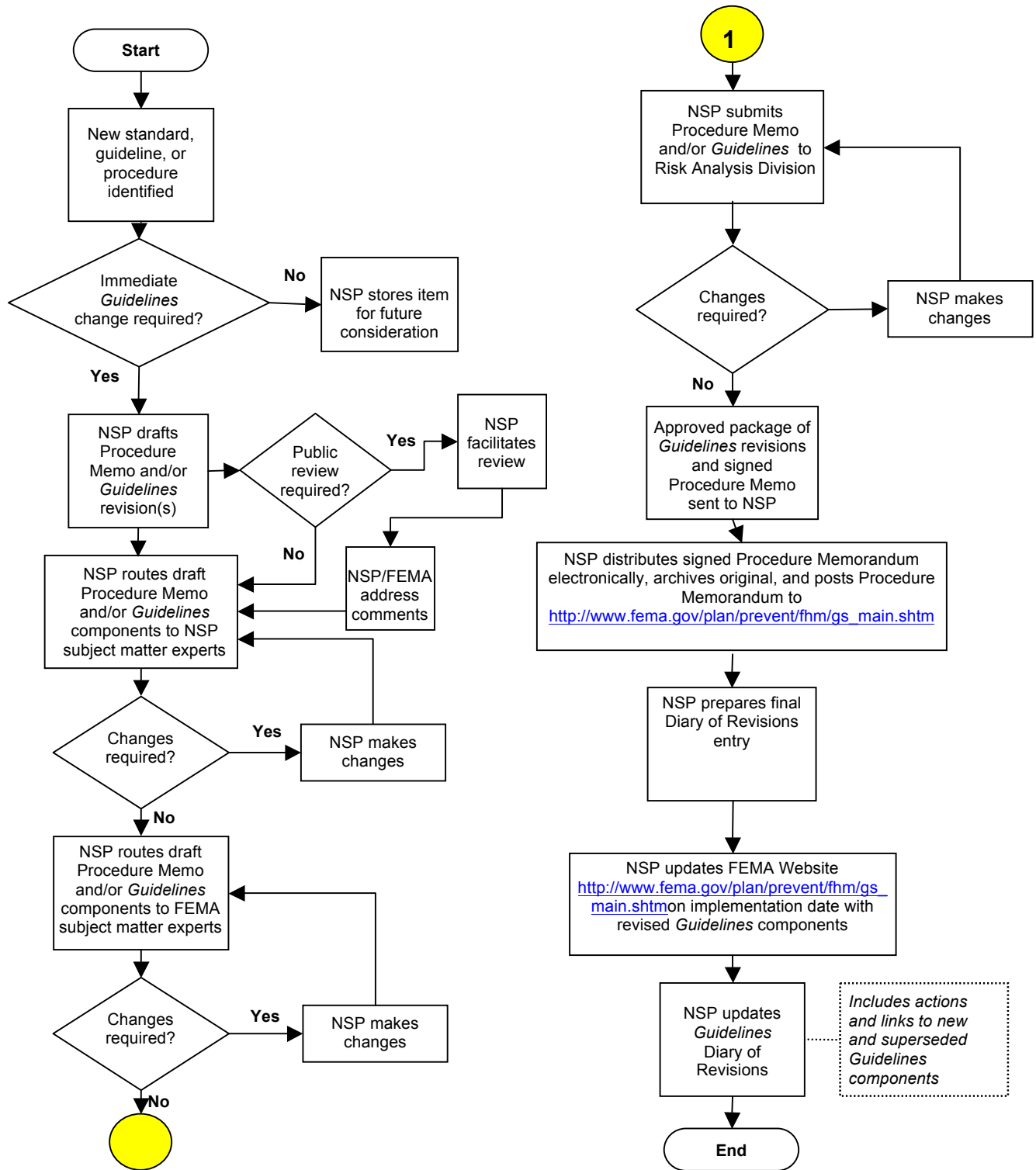


Figure 2. Process Flow for Revising the Guidelines and Producing Procedure Memorandums



Guidelines and Specifications for Flood Hazard Mapping Partners

Document Maintenance and Control Plan

3.1.2 Guidelines Update

FEMA and the NSP shall conduct a comprehensive (and collaborative) review of the *Guidelines* every two to four years. FEMA and NSP staff shall review each component, incorporating, as appropriate, items in the Deferral Queue and any other necessary changes. A revised version of the *Guidelines* shall be reissued with a new revision date.

3.2 Collaborative Review

3.2.1 Procedure Memorandums

For changes to the *Guidelines* necessitated by a Procedure Memorandum, one of the following four collaborative review options shall be employed by the NSP (depending on the complexity and gravity of the proposed change):

1. Serially route a hard copy notebook of the draft Procedure Memorandum and the draft revised *Guidelines* components through the subject matter experts at FEMA and the NSP.
2. Serially route electronic review copies to the subject matter experts via e-mail.
3. Concurrently distribute electronic review copies to the subject matter experts at FEMA and the NSP.
4. Post the documents on the MapMod_docs portion of the floodmaps.fema.gov site or other agreed-upon site for FEMA and NSP review.

FEMA and NSP staff involved in the revision shall determine the appropriate review and routing process for interim updates and communicate that choice to the reviewing subject matter experts when the review process begins.

During the review and concurrence process, if a requested change is not approved, the NSP shall provide an explanation to the originator of the proposed change.

3.2.2 Documents Prepared by FEMA-NSP Teams

A FEMA-NSP Team identifying revised standards, guidelines, or procedures may produce a Procedure Memorandum documenting the change as described in Subsection 3.2.1 or produce a new document that must be incorporated into the *Guidelines*. If the revised standard, guideline, or procedure affects how FEMA identifies flood hazards and depicts them on maps, review of the proposed change by flood hazard mapping stakeholders and, as warranted, the public and private sector should be obtained and considered before FEMA finalizes and implements the revised standard, guideline, or procedure.



Guidelines and Specifications for Flood Hazard Mapping Partners

Document Maintenance and Control Plan

3.3 Approval and Distribution

After FEMA and NSP staff have reached consensus on the proposed changes, the NSP shall submit the change package in hardcopy and electronic form to the Risk Analysis Division for review and approval. The NSP shall work with the Hazard Identification Section Chief or his/her designee to incorporate review comments and to prepare the final document(s) for approval. The Risk Analysis Branch will return the signed Procedure Memorandum to the NSP, who will archive the signed hardcopy original of the memorandum, distributed a dated, electronic copy of the memorandum to FEMA HQ and RO staff and affected FEMA contractors via e-mail or other agreed-upon means. The NSP shall post procedure memorandums and the approved *Guidelines* on the FEMA Guidelines and Specifications Web site. http://www.fema.gov/plan/prevent/fhm/gs_main.shtm.

3.4 Document Control

The *Guidelines* shall constitute a controlled document. The cover pages of the volumes and appendices shall contain the latest revision date. Each page of the *Guidelines* will include a header (containing the document title, revision date, and a footer (containing the primary section number). Primary sections are defined as those sections that have only one decimal (e.g., 1.1). The footer also contains volume-level page numbering. To enable identification of the most recent date of change for each section, the beginning of each section and subsection identifies the most recent revision date.

Figures 3 and 4 show sample *Guidelines* cover and section pages, respectively, that demonstrate the document control protocol. More information on document control through versioning is provided in Section 3.6.

3.5 Diary of Revisions and Summary of Changes

To facilitate users' understanding of changes made to the *Guidelines* during revisions, the NSP shall post a Diary of Revisions (illustrated in Figure 1) on the FEMA website (http://www.fema.gov/plan/prevent/fhm/gs_main.shtm). A Summary of Changes (see Figure 5) also shall be located at the beginning of each volume or appendix to provide more detailed information about the nature of changes made during each revision to the *Guidelines* that is made subsequent to the initial publication date in February 2002.



Guidelines and Specifications for Flood Hazard Mapping Partners

Document Maintenance and Control Plan

3.6 Version Control

To further ensure that users are able to identify the most current information, the cover page and page headers of each *Guidelines* component shall display both the annual revision date and the date of any interim revisions as shown in Figures 3 and 4.



Document Maintenance and Control Plan

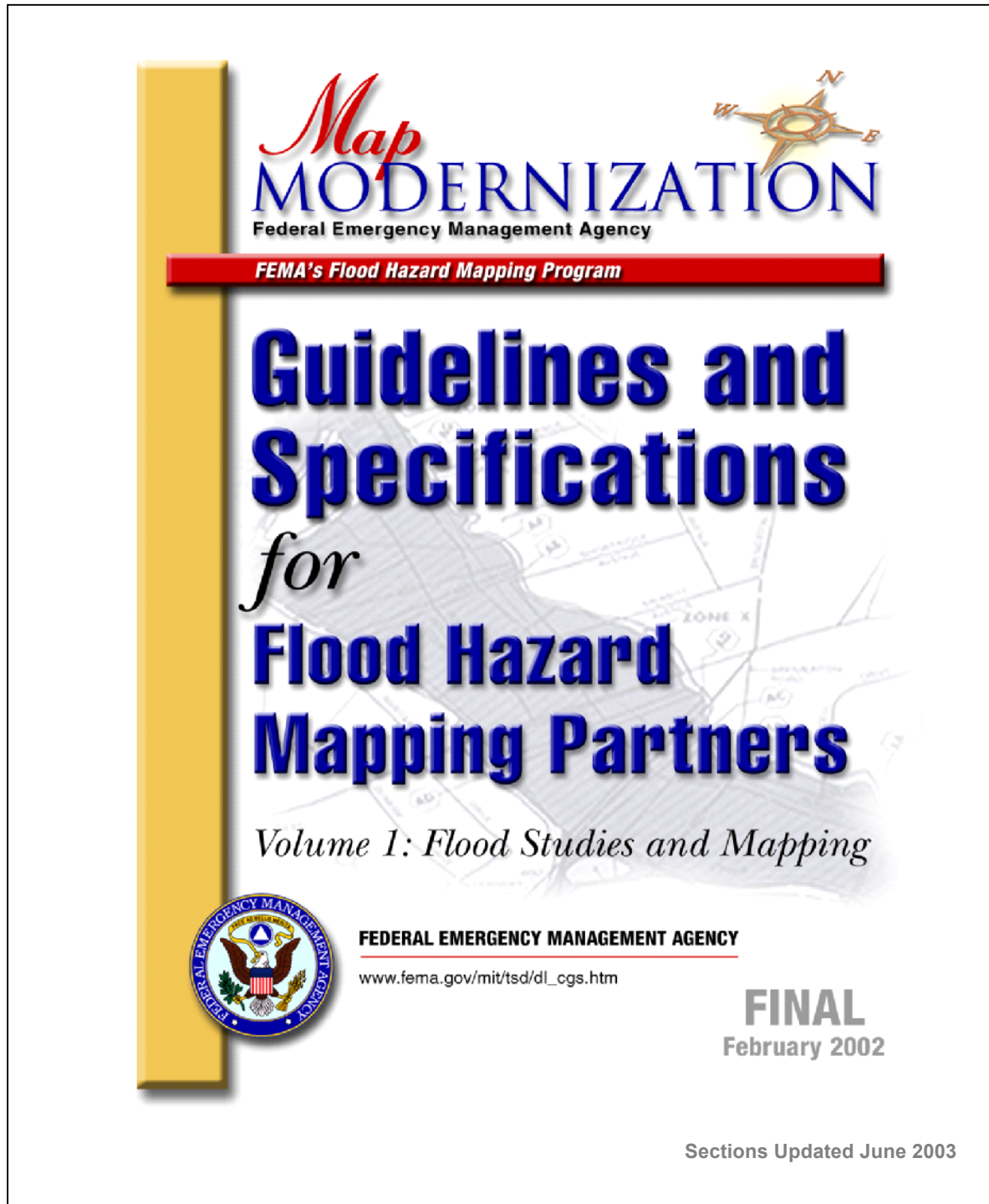


Figure 3. Sample *Guidelines* Cover Page Showing Annual and Interim Revision Dates



Document Maintenance and Control Plan

Guidelines & Specifications for Flood Hazard Mapping Partners [April 2003; Sections Updated June 2003]

Volume I

Flood Studies and Mapping

Header shows document title and annual revision date

Subsection-level revision date

1.1 Overview of the Flood Map Project Process

[April 2003]

The Federal Emergency Management Agency (FEMA) has specific mandates within the National Flood Insurance Act of 1968, as amended, to identify flood hazards throughout the nationwide and publish and update flood hazard information in support of the National Flood Insurance Program (NFIP). FEMA is required by the 1968 Act to consult with local officials in identifying floodprone areas, and specific procedures are described in the Act for establishing proposed flood elevations.

The NFIP regulations were developed as the program evolved. They codify the requirements of the 1968 Act and identify the administrative procedures required to carry out the statutory mandates. Parts 65, 66, 67, 70, and 72 of the NFIP regulations refer to specific procedures to be followed in flood hazard mapping activities. To fulfill its mandate to identify floodprone areas, FEMA has an ongoing program to (1) develop new Flood Insurance Rate Maps (FIRMs) for floodprone communities without maps and (2) to produce updated FIRMs for communities with maps. This Volume details the processes, guidelines, and specifications by which FEMA develops and updates FIRMs and collateral Flood Insurance Study (FIS) reports.

Flood Map Project Activities

Activities for developing a new FIRM and/or updating an existing FIRM (both referred to hereinafter as "Flood Map Projects") are completed in four phases:

- 1. Mapping Needs Assessment;
2. Project Scoping;
3. Topographic and Flood Hazard Data Development/FIS Report and FIRM Map Production; and
4. Preliminary/Post-Preliminary FIS Report and FIRM Processing.

Figure 1-1 depicts the phases of the process, which is applicable to all Flood Map Projects, including those that involve the following:

- Developing new or updated flood hazard data;
Digitizing floodplain boundaries from the effective FIRMs and fitting them to a digital base map, thus converting the existing manually produced FIRMs to digitally produced FIRMs referred to as DFIRMs; and
Combinations thereof.

Subsection-level revision date

[July 2003]

1.1.1 Mapping Needs Assessment

For communities with effective Flood Hazard Maps, the purpose of the Mapping Needs Assessment is to evaluate whether the flood hazards and other data shown on the Flood Hazard Map are adequate. If they are not adequate, the community will identify the specific data elements that need to be updated (e.g., flood hazard data for specific flooding sources or base map information).

Footer shows volume-level page numbering

1-1

Footer shows primary section number

Section 1.1

Figure 4. Sample Guidelines Page



Document Maintenance and Control Plan

Guidelines & Specifications for Flood Hazard Mapping Partners [April 2003; Sections Updated June 2003]

Volume 3
Program Support

The following Summary of Changes details revisions of Volume 3 subsequent to the initial publication of the Guidelines in February 2002. These changes represent new or updated guidance for Flood Hazard Mapping Partners.

Table with 3 columns: Date, Affected Section(s), and Summary of Change. It contains two rows of data and several empty rows.

Figure 5. Sample Summary of Changes Page



Document Maintenance and Control Plan

4.0 Roles and Responsibilities

Several entities and individuals have roles and responsibilities in the maintenance and document control of the *Guidelines* and Procedure Memorandums. Table 1 below provides details of each entity’s responsibilities as it relates to the *Guidelines* and Procedure Memorandums. The “Other FEMA Contractors” referenced in Table 1 include, but are not limited to, the FEMA Map Service Center and Systems Engineering and Technical Assistance Contractor.

Table 1. Roles and Responsibilities

Role	Responsibility
FEMA	<ul style="list-style-type: none"> • Provide oversight to ensure that the <i>Guidelines</i> meet the NFIP mission and objectives. • Identify need for new procedures, specifications, or guidance. • Provide oversight of new and revised protocol affecting the <i>Guidelines</i>. • Review and approve changes to the <i>Guidelines</i> and Procedure Memorandums.
Guidelines Team	<ul style="list-style-type: none"> • Identify new procedures or specifications for determining flood hazards and/or depicting them on FIRMs • Prepare description of new procedures or specifications for inclusion in Procedure Memorandum and/or revised sections of the <i>Guidelines</i> • Collaborate to review proposed changes and revise the <i>Guidelines</i>. • Serve as focal point for FEMA and NSP in the maintenance and revision of the <i>Guidelines</i>.
NSP	<ul style="list-style-type: none"> • Coordinate review and revision of the <i>Guidelines</i> with FEMA HQ and RO staff. • Prepare draft and final revisions to the <i>Guidelines</i>. • Prepare draft and final Procedure Memorandums. • Electronically distribute Procedure Memorandums. • Retain signed original Procedure Memorandums • Post Procedure Memorandums on FEMA Guidelines and Specifications Web site • Prepare draft entry for the <i>Guidelines</i> Diary of Revisions when an interim change is prepared. • Coordinate <i>Guidelines</i> revision and Procedure Memorandum reviews. • Notify reviewers of any recommended changes that were not incorporated. • Post updated versions of <i>Guidelines</i> and Diary of Revisions on FEMA Guidelines and Specifications Web site • Maintain deferral queue. • Archive superseded sections of the <i>Guidelines</i> on FEMA Guidelines and Specifications Web site.
CTP Program Participants, IDIQs, and Other FEMA Contractors	<ul style="list-style-type: none"> • Recommend changes to <i>Guidelines</i> components based on experience with mapping projects. • Review and comment on changes to <i>Guidelines</i> components as appropriate.



Guidelines and Specifications for Flood Hazard Mapping Partners

Document Maintenance and Control Plan
