Map MODERNIZATION

Federal Emergency Management Agency

FEMA's Flood Hazard Mapping Program

Guidelines and Specifications for Flood Hazard Mapping Partners

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Volume 2: Map Revisions and Amendments

FEDERAL EMERGENCY MANAGEMENT AGENCY

www.fema.gov/mit/tsd/dl_cgs.htm

FINAL

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Volume 2

2.1 Physical Map Revisions

FEMA will typically initiate a Physical Map Revision (PMR) in response to a map revision request when one of the following will occur:

- Changes resulting from the requested revision will be extensive and will cover more than one panel of the effective Flood Insurance Rate Map (FIRM).
- Changes will result in significantly more mapped area being added to the Special Flood Hazard Areas (SFHAs).
- Changes will result in increases in the Base Flood Elevations (BFEs) shown on the effective FIRM.

FEMA also may prepare a revised Flood Insurance Study (FIS) report and/or Flood Boundary and Floodway Map (FBFM), depending on the nature of the revision. Under certain circumstances, FEMA may issue a Letter of Map Revision (LOMR) even if the above-mentioned conditions exist. The Mapping Partner that is assigned by FEMA to process the revision request and FEMA shall use the Standard Map Revision Decision-Making Flowchart (Figure 2-1) in selecting a processing option.

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At the direction of the FEMA Project Officer (PO) or his/her designee, the Mapping Partner shall prepare a revised FIRM and, as necessary, FIS report and FBFM in a standard publication format in accordance with the specifications outlined in Appendices J and K of these Guidelines. To accomplish this, the Mapping Partner shall:

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- Update the base information on the affected FIRM/FBFM panels as necessary;
- Prepare manuscripts for use in drafting or digitizing the revised FIRM/FBFM panels;
- Prepare the revised FIS report, FIRM, and FBFM; and
- Prepare and ensure accuracy and completeness of final reproduction materials, including a camera-ready copy of the FIS report and negatives of the FIRM and FBFM, or positive plots on Mylar, or digital files, for printing by GPO.

Detailed information on the procedures for processing PMRs is provided in the following subsections.

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2.1.1 Receipt and Acknowledgment

Map revision requests and any accompanying data from community officials and other Mapping Partners may be transmitted to the Mapping Partner assigned to process the revision request by the FEMA PO, his/her designee, or other FEMA staff. If such requests are submitted directly to the Mapping Partner that processes map revision requests for FEMA, that Mapping Partner (hereinafter referred to as the processing Mapping Partner) shall inform the FEMA PO or his/her designee of any requests for such revisions submitted directly to the processing Mapping Partner.

The processing Mapping Partner shall inventory the materials received and, within 5 working days of receipt, send an acknowledgment letters to the Chief Executive Officer (CEO) of the community. If the requester is anyone other than the CEO, the Mapping Partner shall send the requester a copy of the acknowledgment letter and, if necessary, telephone the requester to explain the review procedures.

In accordance with Section 65.4 of the NFIP regulations, all requests for changes to effective maps other than those initiated by FEMA must be made in writing by the CEO of the community. The processing Mapping Partner shall request community concurrence if this information was not submitted with the request. If applicable, the processing Mapping Partner shall also request State concurrence, if that concurrence was not submitted with the revision request.

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2.1.2 Case Initiation

Upon receipt of the request, the processing Mapping Partner shall assign a case number (if appropriate); create a revision case file, in accordance with Section 66.3 of the NFIP regulations (see Appendix F of these Guidelines), and telephone the revision requester to obtain general information, including:

- Name and address of the CEO and community contact person
- Location of community map repository

The processing Mapping Partner also shall request, in writing, updated information from the community on other flooding sources, available hydraulic data, changes to corporate boundaries or jurisdictions, and other information pertinent to flood mapping.

The processing Mapping Partner shall enter the revision request into an in-house Management Information System (MIS) and the Letter of Map Change (LOMC) module of FEMA's Community Information System (CIS) database, make an initial determination as to the expected processing procedure (e.g., PMR, LOMR, LOMR-F), and record the date of receipt as the date from which all required processing dates are determined.

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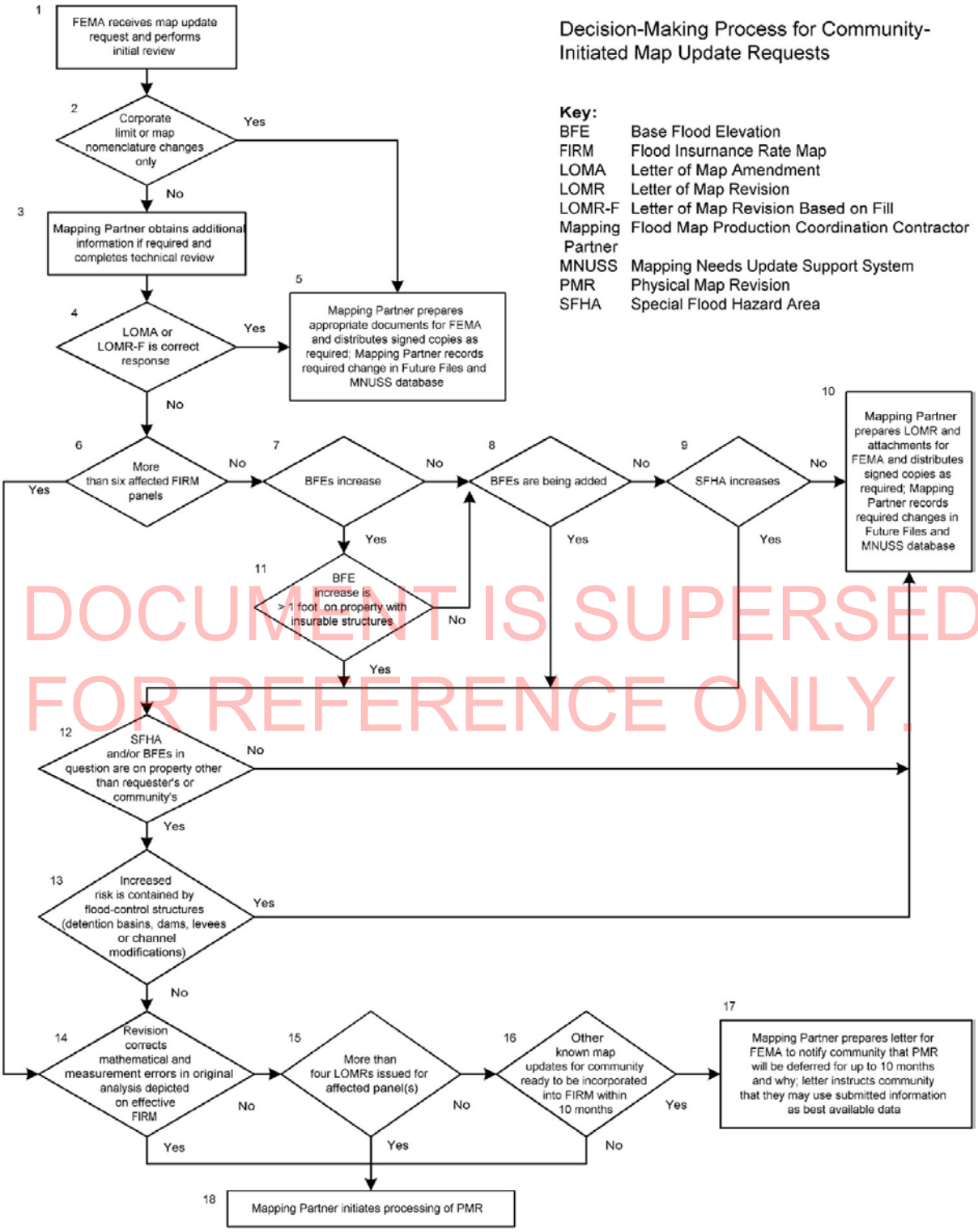

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Figure 2-1. Standard Map Revision Decision-Making Flowchart

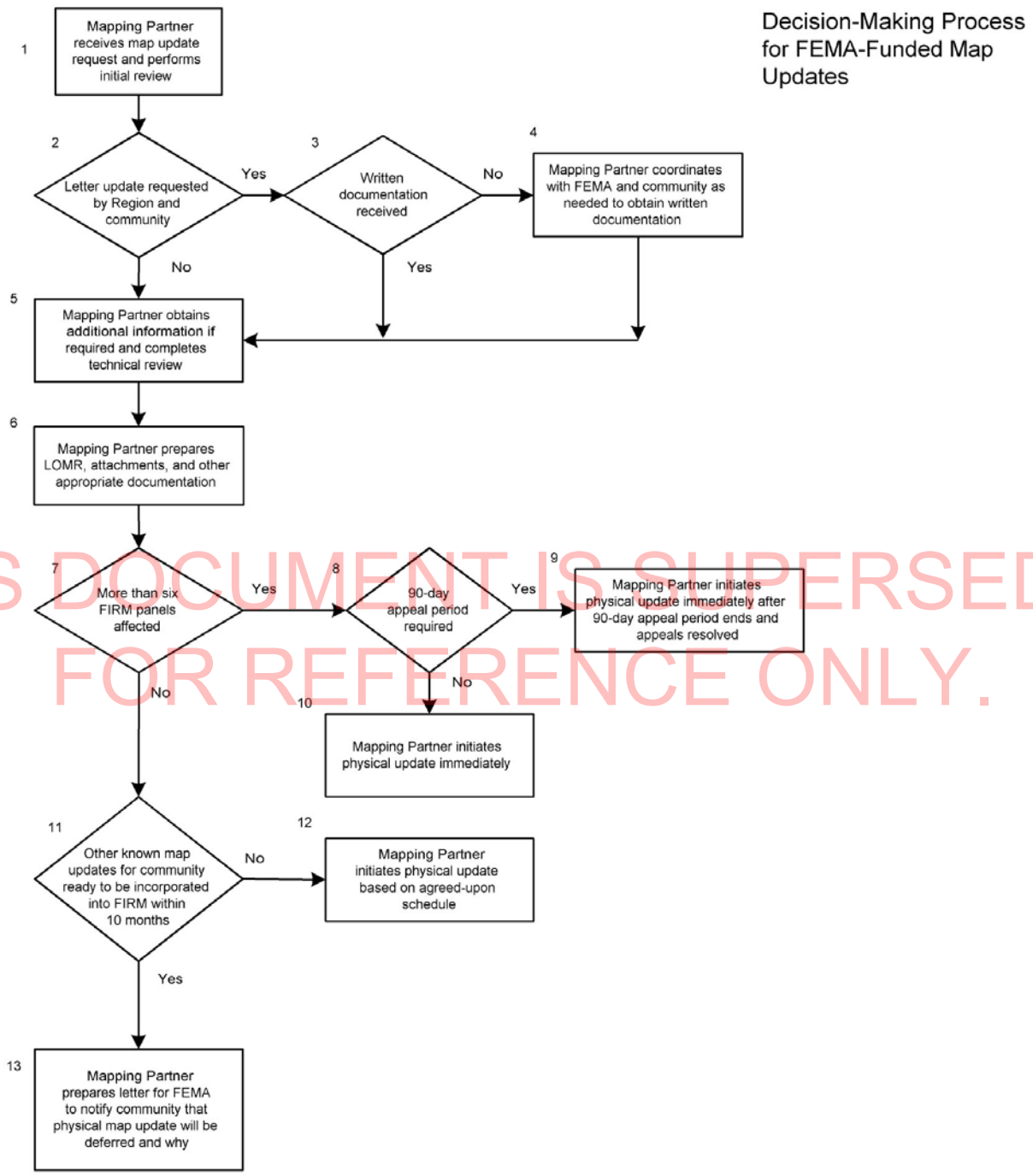

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Figure 2-1. Standard Map Revision Decision-Making Flowchart (Cont'd)

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2.1.3 Case Initiation

Upon receipt of the request, the processing Mapping Partner shall do the following:

- Assign a case number (if appropriate);
- Create a revision case file, in accordance with Section 66.3 of the NFIP regulations (see Appendix F of these Guidelines); and
- Telephone the revision requester to obtain general information, including (1) name and address of the CEO and community contact person and (2) location of community map repository.

The processing Mapping Partner also shall request, in writing, updated information from the community on other flooding sources, available hydraulic data, changes to corporate boundaries or jurisdictions, and other information pertinent to flood mapping.

The processing Mapping Partner shall enter the revision request into an in-house Management Information System (MIS) and the Letter of Map Change (LOMC) module of FEMA's Community Information System (CIS) database, make an initial determination as to the expected processing procedure (e.g., PMR, LOMR, LOMR-F), and record the date of receipt as the date from which all required processing dates are determined.

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2.1.4 Initial Reconnaissance

After the case has been properly recorded, the processing Mapping Partner shall begin a search of all available records to determine the status of the community in the NFIP and to identify all past actions by FEMA in the community that may affect the request.

The processing Mapping Partner shall determine whether all data required to address the request have been submitted, advise the FEMA PO or his/her designee of the results of this review, and make a recommendation concerning action to be taken.

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2.1.5 Program Status and Map Actions

The processing Mapping Partner shall review various portions of FEMA's databases (i.e., CIS, Monitoring Information on Contracted Studies (MICS), Map Needs Update Support System (MNUSS)) to determine the status of the community in the NFIP and obtain information on complete, active, and future required restudies, map revisions, and map amendments.

The processing Mapping Partner also may use the *NFIP Community Status Book*, available in hardcopy form from the MSC or from the Mitigation Library on FEMA's Internet site

(http://www.fema.gov/fema/csb.htm), to determine whether the community is participating in the Emergency or Regular Phase of the NFIP.

The processing Mapping Partner shall review the following data sources to obtain more detailed information on the nature and extent of any past map actions in the community:

- **Future Revision Files**—The processing Mapping Partner shall review these files to determine if additional revisions to the FIS report, FIRM, or FBFM are warranted. These files exist because, from time to time, information is submitted by the community or identified during the course of processing a restudy or map revision that does not significantly affect the community's participation in the NFIP. Because of funding constraints, these revisions are deferred for future action and, at the request of the FEMA PO or his/her designee, placed in the future revision files. In particular, the processing Mapping Partner should review this information for changes affecting the underlying maps or models used in preparing the effective FIRM, FBFM, and FIS report.

- **LOMA and LOMR-F Files**—The processing Mapping Partner shall review these files to determine if past LOMA and LOMR-F actions are mappable (i.e., of sufficient size and scope to warrant inclusion in the ongoing revision). In general, single-lot LOMAs and LOMR-Fs do not warrant inclusion because of map scale limitations. However, multiple-lot LOMAs and LOMR-Fs may warrant inclusion in a PMR. (Additional information on LOMA and LOMR-F processing is provided in Subsection 2 of these Guidelines.)

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- **MNUSS**—As with the Future Revision Files, the processing Mapping Partner shall review the data in MNUSS and any supporting information to determine if additional revisions to the FIS report, FIRM, or FBFM may be warranted.

- **Other Items**—The processing Mapping Partner shall ascertain the relevance of Coastal Barrier Resources System (CBRS) designations to the project area, and shall determine if the community has a floodplain ordinance in compliance with the latest version of the NFIP regulations.

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2.1.6 Required Data

Based on the reason for and extent of the request, the processing Mapping Partner shall determine whether sufficient data have been submitted by the community or other revision requester for additional data in accordance with the applicable portions of Sections 65.5, 65.6, 65.7, 65.10, 65.11, 65.12, and 65.13 of the NFIP regulations. In addition, the processing Mapping Partner shall ensure that the requester has completed and submitted the appropriate application/certification forms from the latest version of the MT-2 application/certification forms package, which may be downloaded from http://www.fema.gov/mit/tsd/dl_mt-2.htm.

All data submitted must be certified by a Registered Professional Engineer or Licensed Land Surveyor in accordance with Part 65 of the NFIP regulations. Examples of standard data requirements for various modifications include, but are not limited to, the following:

All Revisions

1. Topographic work map that includes the entire area of the revision and delineates floodplain and/or floodway boundaries, BFEs, and cross-section locations, and all applicable items required in the MT-2 package

2. Floodplain and/or floodway boundary delineations on the effective map panels and the topographic work map

3. Notification to affected adjacent communities

4. Evidence that all revisions involving structures or fill placement meet the criteria of Sections 60.3 and 65.5 of the NFIP regulations, which require that the community's NFIP permit official certify that proposed or existing structures to be removed from the SFHA be "reasonably safe from flooding"

5. Certified as-built construction or grading plans (if appropriate)

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Revisions in Riverine Areas

1. Hydrologic analysis (if the discharges in the effective FIS report are not used)

2. Effective hydraulic model run duplicating original hydraulic model (multiple profile and floodway). See Appendix C, Subsection C.5.2.1 of these Guidelines for information on FEMA's policy for conversion to HEC-RAS.

3. Existing hydraulic model (multiple profile and floodway) if the calibration hydraulic model run does not reflect the floodplain conditions prior to the start of the project

4. Revised hydraulic model (multiple profile and floodway)

5. Floodplain and/or floodway boundary delineations on the effective map panels and the topographic work map

Channelizations

1. Transition structure design plans for as-built conditions

2. New hydrologic analyses or diversion channel designs

Levees (Dikes, Berms, and Embankments) (See Appendix H of these Guidelines)

1. Evidence of structural stability, certified by a Registered Professional Engineer
2. Evidence of operation and maintenance provisions
3. Interior drainage analyses and SFHA boundary delineations
4. Demonstration of compliance with Section 65.10 of the NFIP regulations
5. Additional design data as necessary

Dams (Detention Basins and Reservoirs)

1. Certification by a Registered Professional Engineer that impoundment structures will remain stable during the base flood
2. Evidence of operation and maintenance provisions
3. Hydrologic analyses for downstream reach, if the dam is designed to lower the base flood discharge

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Flood-Control Structures Subject to Alluvial Fan Flooding (see Appendix G of these Guidelines)

1. Certification by a Registered Professional Engineer that the flood-control structures will be able to withstand the hazards associated with flooding, erosion, scour, and relocation of flow paths during the base flood discharge
2. Hydrologic analyses that quantify the discharges (if the discharges on which the effective FIRM is based are not used) and the volumes of water, debris, and sediment movement
3. Engineering analyses demonstrating the impact of flooding from sources other than the fan apex
4. Revised analysis of alluvial fan flooding (if the analysis on which the effective FIRM is based is not used), accompanied by a discussion of the effects of (1) the depth and velocity of flooding, and (2) the scour and sediment deposition on other areas of the fan
5. Evidence of operation and maintenance provisions
6. Revised floodplain boundary delineations on the affected panels of the effective FIRM

Evidence of maintenance provisions, where referenced above, are to be in the form of an ordinance that specifies the activities to be performed, the frequency of performance, and the community officials responsible for the performance. If maintenance is to be accomplished by an agency other than the community, a logical provision (e.g., ordinance) for community

monitoring and backup maintenance is required. The Mapping Partner shall ensure that maintenance agreements are submitted for levees and dams.

Certifications, where referenced above, are defined as follows:

- Certification of data is a statement that the data are accurate to the best of the certifier's knowledge.
- Certification of analyses is a statement that the analyses have been performed correctly and in accordance with sound engineering practices.
- Certification of structural works is a statement that the works are designed in accordance with sound engineering practices to provide protection from the base flood.
- Certification of as-built conditions is a statement that a structure has been built according to the plans being certified, is in place, and is fully functional.

The processing Mapping Partner shall ensure that certifications include the certifier's name, signature, registration number, and the registration date of the certifier.

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2.1.7 Technical Review

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The processing Mapping Partner shall review the technical, scientific, and other information submitted by the revision requester to ensure that the data are technically accurate, consistent with standard engineering practice and FEMA standards, and sufficient to warrant a revision. The extent of the technical review will, generally, be limited to a review of the information presented on the application/certification forms and the supporting documentation submitted with them.

For revisions involving the addition of detailed flood hazard information or changes to flooding sources originally studied by detailed methods, analyses and other supporting data for the 10-, 50-, 100-, and 500-year floods and regulatory floodway may be required. At a minimum, the analyses and other supporting data provided in support of a revision request must meet the original standards employed by FEMA for the preparation of the FIS report, FIRM, and FBFM, which are documented in Appendices J and K of these Guidelines.

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2.1.7.1 Hydrologic Analyses

FEMA requires that the computations performed to support requests for revisions to effective FIS reports, FIRMs, and FBFMs be based on the flood discharge values used for the effective FIS report and FIRM if those flows are still applicable. However, revision requests also may be based on new hydrologic conditions or better estimates of the flood discharges if significant hydrologic changes have occurred.

The revision requester shall provide 5- and 95-percent confidence limits in support of new discharge values, when gage statistical analysis is performed in support of new hydrology. The revision requester shall provide sufficient data to support the use of the new discharges for the 100- and, if necessary, 10-, 50-, and 500-year floods; the revision requester also shall determine all changes to the FIS report, FIRM, and FBFM that would result from the use of the new flood discharges. Therefore, the revision requester usually must submit hydraulic analyses and revised floodplain and floodway boundary delineations, in addition to hydrologic analyses.

The processing Mapping Partner shall review the information presented in the MT-2 application/certification forms package to determine if the flood discharges are reasonable and adhere to the requirements listed below. The processing Mapping Partner shall check the flood discharge values for consistency, within the limitations of the methodology employed, throughout the information submitted by the revision requester. In performing this check, the processing Mapping Partner shall verify that, for flooding sources studied by detailed methods, the revision requester has submitted adequate information for any of the four recurrences interval floods that may be affected by the new hydrologic analyses.

The following requirements apply to revision requests involving revised hydrology based on existing conditions:

- The revised flood discharge must be significantly different from the effective flood discharge. The revised flood discharge shall be adopted if the effective flood discharge does not fall within the 5- and 95-percent confidence limits of the revised estimates. These limits shall be determined using methods contained in Bulletin 17B, *Guidelines for Determining Flood Flow Frequency* (Interagency Committee on Water Data, 1982).

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- In cases where the new flood discharge must be approved by the State, the processing Mapping Partner shall ensure that the proper approval from the State has been acquired and submitted by the revision requester.

- In cases where the new flood discharge must be approved by a regional/local flood-control agency, the processing Mapping Partner shall ensure that the proper approval from the regional/local flood-control agency has been acquired and submitted by the revision requester.

- An alternative methodology, if used by a revision requester, must meet the requirements of Paragraph 65.6(a)(6) of the NFIP regulations and must be on FEMA's list of accepted computer models.

- For the revised hydrologic analyses, the revision requester shall analyze the same recurrence interval floods as those analyzed for the effective analyses.

- The results from the revised hydrologic analyses must match those for contiguous communities.

- The data accumulated and analyses performed must be certified by a Registered Professional Engineer and submitted by revision requester to FEMA for review.

If the community has elected to present flood hazard information based on future-conditions hydrology on the FIRM and in the FIS report, the guidance provided in Subsection 2.4.6.7 shall be followed.

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2.1.7.2 Hydraulic Analyses

The revision requester shall perform hydraulic analyses to support a revision request based on new hydrologic conditions or physical changes in channel or overbank conditions, if those conditions affect the elevation and extent of the base flood. For revisions involving flooding sources originally studied by approximate methods and designated as Zone A on the effective FIRM, the analyses performed by the revision requester generally must be consistent with FEMA standards for approximate studies presented in Volume 1 and Appendix C of these Guidelines. Therefore, the analyses may be in the form of hand calculations for step-backwater, normal-depth, or stage-frequency relationships, or the analyses may be based on the use of step-backwater or coastal flooding computer programs.

If the effective hydraulic model is available, the revision requester shall use it to establish baseline conditions. For revisions involving flooding sources studied by detailed methods for the effective FIS, analyses performed by the revision requester must be consistent with FEMA standards for detailed studies presented in Volume 1 and Appendix C of these Guidelines. Therefore, the analysis usually shall consist of step-backwater computations for riverine flooding sources, stage-frequency analyses for lacustrine flooding, hand computations for sheetflow areas, and storm-surge and wave-height or wave-runup calculations for coastal flooding.

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The revision requester shall ensure that all submitted information and data are consistent. Therefore, the revision requester shall eliminate discontinuities between the flood hazard information shown for revised areas and the flood hazard information shown for unrevised areas in the FIS report and on the FIRM and FBFM before submitting the revision request to FEMA for review and processing.

In addition, for revisions based on the effects of levees or other flood-control structures that have been credited with providing base flood protection, the revision requester shall submit verification, in the form of technical analyses, that those structures meet the minimum criteria outlined in Section 65.l0 of the NFIP regulations. (Additional information on the criteria for crediting for disaccrediting levees or other flood-control structures is provided in Appendix H of these Guidelines.)

Similarly, for flood-control structures located in areas subject to alluvial fan flooding, the revision requester shall submit technical analyses to verify that the minimum criteria of Section 65.13 of the NFIP regulations are met. (Additional information on the criteria for flood-control structures on alluvial fans is provided in Appendix G of these Guidelines.)

If a PMR is processed, the processing Mapping Partner shall verify that the effects of such structures are properly discussed in the FIS report and shown on the FIRM and FBFM.

The following requirements shall apply to requests involving revised hydraulic analyses:

- Revision requests shall be based on the effective hydraulic model. Where the input data representing the effective hydraulic model are unavailable, the revision requester shall develop an approximation. The revision requester shall establish a new model using the original cross-section topographic information, where possible, and the flood discharges on which the current FIS report and FIRM are based. The model must use the same effective-flow areas as established in the original effective analysis and must be calibrated to reproduce the original BFEs to within 0.5 foot. (See Appendix C, Subsection C.5.2.1 of these Guidelines for information on FEMA policy for conversion to HEC-RAS.)

- If the revision requester uses an alternative hydraulic methodology, that methodology must be on FEMA's list of acceptable computer models and meet the requirements of Paragraph 65.6(a)(6) of the NFIP regulations.

- To avoid discontinuities between the revised and unrevised flood data, the revision requester shall submit hydraulic analyses be that are extensive enough to ensure a logical transition can be shown between the revised flood elevations, floodplain boundaries, and floodway boundaries and those developed previously for areas not affected by the revision. The revised and unrevised water-surface elevations must match within 0.5 foot where such transitions occur; however, FEMA would prefer that the transitions match within 0.10 foot if possible. Exceptions to this standard must be approved by the FEMA PO or his/her designee.

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- In general, revision requests that result in increases in BFEs because of the physical actions of an individual property owner within the regulatory floodway are to be considered a potential violation of NFIP regulations unless evidence is provided to show that the criteria described in Section 65.12 of the NFIP regulations have been met. The processing Mapping Partner shall bring any violation or potential violation of the NFIP regulations to the attention of the FEMA PO or his/her designee. The FEMA PO or his/her designee shall then bring the matter to the attention of the FEMA Regional Office (RO) for followup action with the community involved.

- The processing Mapping Partner shall consult with the FEMA PO or his/her designee to ensure that the provisions of the June 2001 revisions to Sections 65.5 and 65.6 of the NFIP regulations are met. If fill is placed in the community to raise the ground surface to or above the BFE, the community must meet the criteria of Sections 60.3 and 65.5 of the NFIP regulations, which require that the community's NFIP permit official certify that proposed or existing structures to be removed from the SFHA be "reasonably safe from flooding." "Reasonably safe from flooding" means base flood waters will not inundate the land or damage structures to be removed from the SFHA and that any subsurface waters related to the base flood will not damage existing or proposed buildings. Additional information on the June 2001 revisions to Sections 65.5 and 65.6 of the NFIP regulations is provided in FEMA Technical Bulletin 10-01, *Ensuring that Structures Built on Fill In or Near Special Flood Hazard Areas are Reasonably Safe From Flooding*, which may be downloaded directly from the FEMA website at http://www.fema.gov/mit/tb10prop.pdf.

- The processing Mapping Partner shall ensure that the map revision request conforms to all applicable NFIP regulations, and shall consult with the FEMA PO or his/her designee to determine how current FEMA policies may affect the revision.

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2.1.7.3 Coastal Revisions

To compute the stillwater flood level (SWFL), the revision requester shall consider many factors, and the computation is performed through the use of computer models or statistical analysis of tide gage data of adequate continuous record. Any revision of the SWFL must be based on new information that either refutes or supplements the gage data. The revision requester shall submit significant data or produce verifiable information that refutes the information FEMA used to construct the applicable computer model.

In the case of tide gages, the revision requester shall perform a statistical analysis prepared with new data that supplements the existing tide gage records or provides evidence that the data used are incorrect. The processing Mapping Partner shall review the information presented on the MT-2 application/certification forms package to determine the appropriateness of incorporating the revised data on the FIRM.

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For map revision requests in coastal areas based on more up-to-date, site-specific topographic information, the revision requester shall provide a transect and a wave-height analysis based on the profile. For this analysis, the revision requester also may be required to consider other coastal processes, such as erosion and wave runup. This analysis may be conducted based on the terms of the effective FIS report and FIRM, the community, or the FEMA PO or his/her designee.

Map revisions in coastal areas also may be based on existing, new, or improved shore-protection structures, such as bulkheads, seawalls, breakwaters, and dikes. When structures designed to diminish or absorb wave energy (e.g., breakwaters, bulkheads, seawalls) are involved, the revision requester shall submit evidence that the structure will survive the base flood and associated wave action. The items that the revision requester shall address before for a map revision based on coastal structures are listed in *Criteria for Evaluating Coastal Flood Protection Structures***.** **(**See Appendix G of these Guidelines.**)** Structures designed to provide flood protection (e.g., levees, dikes, floodwalls) must conform to Section 65.10 of the NFIP regulations and to the criteria outlined in Volume 1 of these Guidelines.

The revision requester also shall provide assurance from the State or local agency with maintenance responsibility that the structures involved in the revision will be maintained and will not settle, and shall submit as-built drawings of all structures. Wave height analyses based on transacts through these types of structures are valid only when these conditions are met.

The processing Mapping Partner shall review the information presented in the MT-2 application/certification forms package to determine the items that require further review and the appropriateness of incorporating the revised data on the FIRM.

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2.1.7.4 Other Data

Revision requesters also may request changes to flood risk zone designations, changes to floodplain boundaries based on new or more detailed topographic information, and changes to corporate limits.

For revisions to flood risk zone designations, the processing Mapping Partner shall verify the accuracy of any calculations the revision requester submitted and determine whether a revision is warranted based on a review of the MT-2 application/certification forms package and the supporting documentation. Requests that Zone V or Zone A areas be revised to Zone A or Zone B, respectively, are to be supported by hydraulic computations in most cases.

For floodplain boundary revisions based on new or more detailed topographic information, the revision requester will not be required to submit revised hydraulic analyses unless the changes in ground contours have significantly affected the geometry of cross sections used for the effective FIS and FIRM or have altered effective-flow areas. For revisions involving only floodplain boundaries, the processing Mapping Partner shall review the information presented on the MT-2 application/certification forms package to determine whether the requested revisions may be made.

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For changes to corporate limits, the revision requester shall submit an official corporate limits map or certified metes and bounds data to describe the revised boundary areas.

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2.1.8 Reporting and Project Officer Approval

Upon request, the processing Mapping Partner shall advise the revision requester, the FEMA RO, the FEMA PO, or his/her designee about the current status of a technical review. When the technical review is complete, the processing Mapping Partner shall discuss the results of the review, any additional data required to support the requested revision, and any problems encountered during the review with the FEMA PO or his/her designee. If appropriate, the FEMA PO or his/her designee shall direct the processing Mapping Partner to finalize the technical review by one of the following options:

- Requesting, by telephone or letter, additional or revised data to complete the technical review;
- Preparing a LOMR; or
- Preparing a PMR.

For PMRs, the processing Mapping Partner shall prepare a letter, referred to as a 316-PMR letter, to inform the CEO that a PMR will be prepared and request that the community submit any information to be incorporated into the PMR. Additional information on the 316-PMR letter and

other correspondence issued by FEMA and the processing Mapping Partner for a revision request is provided in the FEMA *Document Control Procedures Manual* (FEMA, 2000), which is available for review and downloading from the FEMA Flood Hazard Mapping website at http://www.fema.gov/mit/tsd/frm_docs.htm.

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2.1.9 Preparation of Preliminary Copies of Maps and Reports

Once the revision requester has submitted all required data in accordance with Part 65 of the NFIP regulations and the processing Mapping Partner has completed the technical review and discussed findings with the FEMA PO and his/her designee, The processing Mapping Partner shall prepare Preliminary copies of the revised map panel(s) in accordance with Section 1.4.6 of these Guidelines. The processing Mapping Partner also may prepare a revised FIS report if required by FEMA.

Occasionally, FIRM and/or FBFM panels may be revised to include changes that do not significantly affect the FIS report, such as redelineations of floodplain boundaries to reflect new or updated topographic data. However, because most PMRs will involve significant changes affecting BFEs, flood risk zones, and floodplain and floodway boundary delineations, revisions to the FIS report as well as the FIRM and FBFM will be necessary. The processing Mapping Partner shall follow the guidance in Appendix J of these Guidelines in preparing the revised FIS report.

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2.1.10 Community Review and Comment

At the request of FEMA, the processing Mapping Partner shall transmit Preliminary copies of the revised map panels and FIS report to the community CEO and floodplain management official, revision requester (if other than the CEO or floodplain management official), and others for review and comment. For all revisions, the community shall receive at least a 30-day review period. When BFEs are changed, the statutory 90-day appeal period shall be required.

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2.1.10.1 30-Day Review Period

For PMRs, FEMA generally will provide the community, revision requester (if other than a community), and all other interested parties with a 30-day review period. (For large-scale revisions or at the request of the community, FEMA may allow additional time to review the Preliminary copies.) During the review period, community officials shall submit comments and suggested revisions to the Preliminary copies.

Once the 30-day review period has elapsed, the processing Mapping Partner shall review any comments submitted and determine whether any additional revisions are required. The processing Mapping Partner shall discuss the comments received and any additional data

required to support them with the FEMA PO, his/her designee, and FEMA RO staff. The FEMA PO or his/her designee, in conjunction with the FEMA RO when required, shall determine whether changes are warranted. If the changes are significant (e.g., affect BFEs, affect large areas of SFHA), FEMA may direct the processing Mapping Partner to prepare and distribute Revised Preliminary copies of the revised FIS report, FIRM, and/or FBFM to the community CEO and floodplain administrator and other recipients of the Preliminary copies.

If no information is submitted during the review period or FEMA determines that the changes are not significant enough to warrant issuance of Revised Preliminary copies, FEMA shall direct the processing Mapping Partner to continue the production process. In such cases, the processing Mapping Partner shall incorporate any changes resulting from the review comments into the report and map materials before they are submitted to the FEMA Map Service Center (MSC) for publication by the U.S. Government Printing Office (GPO).

FEMA shall notify the community in a subsequent letter that the requested changes shall be shown on the printed copies of the revised FIS report, FIRM, and/or FBFM. If the PMR will result in modifications to the BFEs, the processing Mapping Partner shall initiate the 90-day appeal period as discussed in Subsection 2.1.1.2. For a PMR that does not involve modifications to BFEs, the processing Mapping Partner shall follow the procedures provided in Subsection 2.

If the PMR does not involve modifications to BFEs, the processing Mapping Partner shall prepare a Letter of Final Determination (LFD). Detailed information on procedures to be followed for preparing and distributing LFDs is provided in Volume 1, Subsection 1.5.2.4 of these Guidelines.)

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2.1.10.2 90-Day Appeal Period

For PMRs that involve new or modified BFEs, the processing Mapping Partner shall initiate the statutory 90-day appeal period to provide residents of the affected community an opportunity to appeal the new or modified BFEs. As in the processing of studies and restudies, the proposed or proposed modified BFEs must be published in a local newspaper with wide circulation and in the *Federal Register* to initiate the appeal period and must be finalized after the appeal period has elapsed, if no appeals are received. (Refer to Volume 1, Subsection 1.4.3.6 of these Guidelines for the procedures to be followed.)

For PMRs, the appeal period is held either before the start of or concurrent with the printing process for the revised FIS report, FIRM, and/or FBFM. The appeal period will occur prior to printing for revisions involving new or higher BFEs and may be concurrent with the printing process for revisions resulting in lower BFEs. For both the prior and concurrent procedures, the appeal period must elapse and the BFEs must be finalized before the revised FIS report, FIRM, and/or FBFM may become effective.

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2.1.11 Proposed Flood Elevation Determinations

When a 90-day appeal period is required for a PMR, the processing Mapping Partner shall prepare and process the correspondence for initiating the appeal period and proposing the new or modified BFEs. As mentioned earlier in this section, the processing Mapping Partner shall prepare the proposed BFE notices for publication in the *Federal Register* and a local newspaper with wide circulation and prepare all FEMA letters that will be sent to the CEO and floodplain administrator of the community, the State NFIP Coordinator, and others.

The processing Mapping Partner shall ensure that the notices are correct, that they include BFEs for all flooding sources for which revisions were made, and that they are published in the local newspaper on the correct date and in the *Federal Register*.

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2.1.12 Appeals and Protests

Appeals and protests concerning PMRs may be submitted by the community or affected property owners during the appeal period. Appellants shall submit appeals to FEMA through the CEO or a community official designated by the CEO in accordance with Part 67 of the NFIP regulations.

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Information on the technical or scientific data that must be submitted to support an appeal or protest is provided in Chapters 3 and 4 of *Appeals, Revisions, and Amendments to National Flood Insurance Program Maps: A Guide for Community Officials* (FEMA, 1993). Appeals may be based only on information indicating that the proposed revised BFEs are scientifically or technically incorrect. Objections of other kinds are termed protests.

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The processing Mapping Partner shall review, evaluate, and resolve all appeals submitted in accordance with the procedures outlined in Part 67 of the NFIP regulations and as amplified in Chapters 3 and 4 of FIA-12, *Appeals, Revisions, and Amendments to National Flood Insurance Program Maps: A Guide for Community Officials* (FEMA 1993). Within 5 working days of receipt of an appeal or protest, the processing Mapping Partner shall prepare an appeal or protest acknowledgment letter. The processing Mapping Partner shall then do the following:

- Evaluate any data submitted;
- Request any additional data required;
- Perform technical analyses if requested by FEMA;
- Prepare and distribute Revised Preliminary copies of the FIS report, FIRM, and/or FBFM, if requested by FEMA; and
- Assist FEMA in preparing and distributing an appeal or protest resolution letter to be sent to the community CEO and floodplain administrator and all appellants.

Changes resulting from protests usually shall be incorporated at the time that the final reproduction materials are prepared. However, if the changes are significant, the FEMA PO or his/her designee may direct the processing Mapping Partner to prepare and distribute Revised Preliminary copies of the revised FIS report, FIRM, and/or FBFM. If a Revised Preliminary is not required, the FEMA PO or his/her designee shall direct the processing Mapping Partner to include the protest resolution in the LFD for the PMR.

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2.1.13 Final Flood Elevation Determinations

When the 90-day appeal period has elapsed and all appeals have been resolved, the processing Mapping Partner shall prepare an LFD and a final BFE notice for publication in the *Federal Register*. (No notice will be published in a local newspaper.) The final BFE notice shall establish the final modified BFEs.

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2.1.14 Preparation of Summaries of Map Action

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As mentioned in Volume 1 of these Guidelines, to assist communities in maintaining the NFIP maps, particularly the FIRM, the processing Mapping Partner shall prepare summaries of the LOMAs, LOMR-Fs, and LOMRs that will be superseded when revised FIRM panels become effective. FEMA will provide this summary, referred to as a Summary of Map Actions (SOMA), to affected communities at significant milestones during the processing of PMRs to make the affected communities aware of the effect that revised FIRM panels will have on previously issued LOMAs, LOMR-Fs, and LOMRs.

To ensure the modifications made by LOMAs, LOMR-Fs, and LOMRs are included in a PMR, the processing Mapping Partner shall perform searches for determinations at four stages: (1) before Preliminary copies of the affected FIRM panel(s) are prepared and sent to the community for review and comment, (2) before Revised Preliminary copies of the affected FIRM panel(s) are prepared and sent to the community for review and comment, (3) before the LFD is sent to the community, and (4) before the effective date of the revised FIRM panels.

At each stage, the processing Mapping Partner shall sort the LOMAs, LOMR-Fs, and LOMRs into the following categories:

- **Category 1** includes those LOMAs, LOMR-Fs, and LOMRs whose results have been shown on the revised FIRM panel(s).

- **Category 2** includes those LOMAs and LOMR-Fs whose results could not be mapped and shown on the revised FIRM panel(s) because of map scale limitations or because the affected areas were determined to be outside the SFHA as shown on the effective FIRM. These LOMCs are automatically revalidated after the revised FIRM panel(s) become(s) effective.

- **Category 3** includes those LOMAs, LOMR-Fs, and LOMRs whose results have not been, and will not be, reflected on the revised FIRM panel(s) because the flood hazard information on which the original determinations were based is being superseded by new flood hazard information.

- **Category 4** includes those LOMAs and LOMR-Fs that will be revalidated through a single letter that reaffirms the validity of a previously issued LOMC. Therefore, LOMAs and LOMR-Fs that were previously issued for multiple lots or structures where the determination for one or more of the lots or structures have changed cannot be revalidated through this administrative process.

For Category 4 LOMCs, the processing Mapping Partner shall review the data submitted in support of the original LOMA LOMR-F, or LOMR request and issue a new determination for the subject properties after the FIRM effective date. If conditions have changed since the original LOMA, LOMR-F, or LOMR was issued, and additional data and fees are required in order to issue a new determination, the processing Mapping Partner will not revalidate or reissue the LOMA, LOMR-F, or LOMR.

The processing Mapping Partner activities in preparing and distributing SOMAs are discussed in detail in Subsections 2.1.14.1 and 2.1.14.2

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2.1.14.1 Pre-Preliminary Activities

During the preparation of the Preliminary copies of the FIRM (and FBFM, if required), the activities below shall be completed. Additional information on SOMA production procedures is provided in Section 10 of *Document Control Procedures Manual* (FEMA, July 2000).

- The processing Mapping Partner shall produce a Preliminary SOMA, which is the product of database management software that searches the records in the CIS to identify LOMAs, LOMR-Fs, and LOMRs completed or pending for the community.

- The processing Mapping Partner shall review the in-house case files, other community-based files, hard copies of LOMAs and LOMR-Fs completed by the FEMA ROs, and case files for LOMAs and LOMR-Fs completed by the ROs to ensure all affected LOMAs, LOMR-Fs, and LOMRs are identified and listed on the SOMA. The processing Mapping Partner shall not investigate LOMAs, LOMR-Fs, and LOMRs that have already been superseded by a previous map (i.e., its determination date is prior to the current effective FIRM date) for inclusion on the SOMA.

- The processing Mapping Partner shall review each identified LOMA, LOMR-F, and LOMR to determine if it has been affected by new flood hazard information and if it can be incorporated into the FIRM. The Mapping Partner shall list those LOMAs, LOMR-Fs, and LOMRs that are unaffected by the new flood hazard information and can be reflected on the FIRM in Category 1 of the SOMA. The Mapping Partner shall list those LOMAs and LOMR-Fs that cannot be reflected on the FIRM but are unaffected by the updated flood hazard information in Category 2 of the SOMA.

- For the remaining LOMAs and LOMR-Fs, the processing Mapping Partner shall review the case files to determine if they can be revalidated. To determine this, the processing Mapping Partner shall perform the following activities: (1) locate the LOMA or LOMR-F site on the Preliminary copy of the FIRM, (2) determine the BFE for the site, and (3) compare the Lowest Adjacent Grade (LAG) or Lowest Finished Floor Elevation (LFFE), if applicable, of the structure(s) or the lowest ground elevation of undeveloped lot(s) to the proposed BFE at the site.

- If the LAG(s), LFFE(s), or lowest ground elevation at the site is above the proposed BFE, the processing Mapping Partner shall include the LOMA or LOMR-F in Category 2 of the SOMA and it will be eligible for revalidation. LOMAs or LOMR-Fs issued for properties with a LAG(s), LFFE(s), or lowest ground elevations below the BFE will be superseded; therefore, the processing Mapping Partner shall include those LOMAs and LOMR-Fs in Category 3 of the SOMA. As noted above, LOMAs and LOMR-Fs are revalidated by a single letter, referred to as the LOMC-Valid letter; therefore, the Mapping Partner shall list determinations issued for multiple structures or lots where the determinations for the lots/structures are no longer as they were originally determined to in Category 4 of the SOMA. The Mapping Partner shall consult with the FEMA PO or his/her designee to ensure that the provisions of the June 2001 revisions to Sections 65.5 and 65.6 of the NFIP regulations are met

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- The processing Mapping Partner shall send the SOMA to the community CEO and floodplain administrator, RO, and State NFIP Coordinator with the transmittal letter that accompanies the Preliminary copies of the revised map panel(s).

- If no LOMAs, LOMR-Fs, or LOMRs have been issued since the affected map panel(s) became effective, the processing Mapping Partner shall include an explanatory paragraph in the transmittal letter to the community to acknowledge this fact, and no SOMA shall be sent.

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2.1.14.2 Post-Preliminary Activities

After mailing the Preliminary copies of the PMR to the community, the processing Mapping Partner shall complete the activities below, as required.

1. When Revised Preliminary copies are prepared and submitted to the community for review, the processing Mapping Partner shall generate a SOMA and conduct a review similar to that conducted before the Preliminary copies were issued.

2. When required, the processing Mapping Partner shall revise the Preliminary SOMA and submit it to FEMA for review with a special transmittal letter to the community. (The special transmittal letter shall be prepared by the processing Mapping Partner.)

3. The processing Mapping Partner shall mail the revised SOMA to the community CEO and floodplain administrator, RO, and State NFIP Coordinator with the special transmittal letter.

4. Approximately 2 weeks before the LFD is to be mailed, the processing Mapping Partner shall generate and review the Final SOMA. The Final SOMA shall include all LOMAs, LOMR-Fs, and LOMRs included in the Preliminary SOMA and all LOMAs, LOMR-Fs, and LOMRs issued since the Preliminary or Revised Preliminary copies of the FIRM were distributed.

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5. The processing Mapping Partner shall mail the Final SOMA to the community CEO and floodplain administrator, RO, and State NFIP Coordinator with the LFD.

6. If no LOMAs, LOMR-Fs, or LOMRs have been issued for the affected map panel(s), the processing Mapping Partner shall include an explanatory paragraph in the LFD to acknowledge this fact, and no SOMA shall be sent.

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2.1.15 Preparation of Revised Reports and Maps for Printing

For PMRs, the Mapping Partner shall prepare final reproduction materials and submit them to the Map Service Center (MSC) for printing by GPO following the procedures discussed in Subsection 1.2.8 of these Guidelines.

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2.1.16 Coordination and Documentation Activities

The processing Mapping Partner shall perform the required coordination and documentation activities necessary for processing each PMR. During the processing, the Mapping Partner shall:

- Communicate with the requester and community, as necessary.
- Coordinate activities with the FEMA RO as directed by the FEMA PO or his/her designee.
- Communicate with other FEMA contractors and Federal, State, and local agencies, as needed.
- Prepare letters and other correspondence for FEMA signature.
- Maintain legal documentation, records of correspondence, and technical data.
- Provide inventory lists, printing requisition forms, status reports, and other information to FEMA as required by the FEMA PO or his/her designee.

In addition, the processing Mapping Partner shall organize, and may be required to submit to FEMA, records of the correspondence and supporting data associated with PMRs. (Refer to Volume 3 of these Guidelines for details.)

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2.2 Coastal Barrier Resources System Revisions

2.2.1 Overview

The U. S. Congress passed the Coastal Barrier Resources Act (CBRA) in 1982 and the Coastal Barrier Improvement Act in 1990, defining and establishing a system of protected coastal areas (including the Great Lakes), known as the Coastal Barrier Resources System (CBRS). The Acts define areas within the CBRS as depositional geologic features consisting of unconsolidated sedimentary materials; subject to wave, tidal and wind energies; and protecting landward aquatic habitats from direct wave attack. The Acts further define coastal barriers as all associated aquatic habitats, including the adjacent wetlands, marshes, estuaries, inlets and nearshore waters, but only if such features and associated habitats contain few manmade structures and these structures and man's activities on such features, and within such habitats do not significantly impede geomorphic and ecological processes.

The Acts provide protection to CBRS areas by prohibiting most expenditure of Federal funds within the CBRS. These prohibitions refer to "any form of loan, grant, guarantee, insurance, payment, rebate, subsidy or any other form of direct or indirect Federal assistance," with specific and limited exceptions.

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In addition to the CBRS, the Coastal Barrier Improvement Act of 1990 established Otherwise Protected Areas (OPAs). OPAs are undeveloped coastal barriers within the boundaries of an area established under Federal, State, or local law, or held by a qualified organization, primarily for wildlife refuge, sanctuary, recreational, or natural resource conservation purposes.

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The U.S. Congress designated the initial CBRS areas in 1982. Subsequent modifications to the CBRS are introduced as legislation to be acted on by the U.S. Congress, and originate from State and local requests, as well as recommendations made by the USFWS (USFWS). After the U.S. Congress approves additions to the CBRS, the new areas are assigned a unique effective date, after which Federal assistance prohibitions apply.

In cooperation with the U.S. Department of the Interior, FEMA transfers CBRS and OPA boundaries to Flood Insurance Rate Maps (FIRMs) using congressionally adopted source maps. FEMA ensures that FIRMs clearly depict the different CBRS areas and OPAs and their prohibition dates with special map notes and symbologies. Specific information on the notes and symbologies is provided in Appendix K of these Guidelines. Although FEMA shows CBRS areas and OPAs on FIRMs, the U.S. Congress is the only entity that may authorize a revision to these boundaries.

This section of the Guidelines uses the terms “Coastal Barriers” and “Coastal Barrier Resources System” units (or CBRS units). These terms are intended to be inclusive of all classifications of Coastal Barriers within the CBRS, including areas designated as OPAs.

[February 2002]

2.2.2 Coastal Barrier Unit Classifications

As of November 2000, the two classifications of Coastal Barrier units are as follows:

1. **Coastal Barrier Resources System** units were originally established by the CBRA of 1982 (Public Law 97-348). The Act established 186 units within the CBRS. The Coastal Barrier Improvement Act of 1990 greatly expanded the identified land in the CBRS established by the CBRA of 1982 and modified existing barrier units. Subsequent to the 1990 Act, new legislation has been, and will likely continue to be, passed by Congress to revise the CBRS.

2. **Otherwise Protected Areas** are undeveloped coastal barriers within the boundaries of an area established under Federal, State, or local law, or held by a qualified organization, primarily for wildlife refuge, sanctuary, recreational, or natural resource conservation purposes. The Coastal Barrier Improvement Act of 1990 established prohibitions in designated OPAs and subsequent legislation has, and will likely continue to, modify OPA boundaries.

For FIRMs prepared after 1991 and prior to November 2000, CBRS units were separated into three classifications. The 1982 Coastal Barrier Resources System units were a separate classification from the 1990 or later Coastal Barrier Resources System units.

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2.2.3 Flood Insurance Prohibitions

Federal flood insurance is available in a CBRS area if the subject building was constructed (or permitted and under construction) before the CBRS area's prohibition date. For CBRS areas designated by the 1982 Act, the sale of Federal flood insurance is prohibited for structures built or substantially improved after October 1, 1983. For subsequent additions to the CBRS, the insurance prohibition date is either the date of the legislation passed by the U.S. Congress or the date of the notice in the *Federal Register* for changes allowed under a previous law such as the 5-year update. For structures located in the OPAs, insurance may be obtained if written documentation is provided certifying that the structure is used in a manner consistent with the purpose for which the area is protected. All prohibition dates are shown on the FIRM.

If an existing insured structure in the CBRS or OPA is substantially improved or damaged, any Federal flood insurance policy will not be renewed. If a Federal flood insurance policy is issued in error, it will be canceled and the premium refunded; no claim can be paid, even if the error is not found until a claim is made.

Each action (legislative or administrative) that results in a revision to CBRS boundaries is relevant to the mapping of the CBRS. New legislation that adds areas to the System creates new prohibition dates. When a particular piece of legislation only removes areas from the System, there are no new prohibition dates associated with the Act. A comprehensive list of significant dates relative to the CBRS is provided in Subsection 2.3.5. Prohibition dates that coincide with

legislation or administrative actions (such as the 5-year update) that added areas to the System are identified in this list.

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2.2.4 Types of Revisions

FEMA has three distinctly different mechanisms for revising FIRMs to reflect modified CBRS boundaries. One of these three mechanisms shall be initiated as soon as FEMA submits the congressionally adopted source maps to the Mapping Partner that is selected by FEMA to revise the affected FIRM panels. Often, a draft set of these maps will be made available either through FEMA or the USFWS. In the event that advanced copies are made available, the Mapping Partner shall scope out the revision and prepare to make the FIRM changes using the most efficient of the methods described below.

2.2.4.1 Letter of Map Revision

The LOMR process entails making the CBRS boundary change by letter. Revising the CBRS boundaries through the LOMR process provides for a quicker turnaround time than the PMR process. This option shall be chosen only when the revision is relatively small in scope.

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When the CBRS revision is processed in this fashion, the MSC shall mail a copy of the LOMR to all parties that are on record as having a copy of the subject FIRM panel(s). This ensures a wider distribution than would normally occur for LOMR distribution. The Mapping Partner shall be responsible for providing the required number of copies to the MSC and for coordinating the distribution in advance. It is imperative that advanced coordination be accomplished to ensure that the LOMR will be distributed by the MSC without delay.

Any CBRS boundary changes effected by LOMR is to be followed immediately by a PMR unless the LOMR can be incorporated into an ongoing map update as discussed below. If the ongoing map update is very early in its processing life or significant delays are expected because of an appeal, the Mapping Partner shall consult with the FEMA PO or his/her designee to determine whether a separate PMR to incorporate the changes in the CBRS LOMR is to be initiated.

2.2.4.2 Ongoing Map Update

Whenever possible, the CBRS boundary changes shall be incorporated into an ongoing map update. If the ongoing map update is very early in its processing life or significant delays are expected because of an appeal, the Mapping Partner shall consult with the FEMA PO or his/her designee to determine whether the LOMR or separate PMR methods are to be initiated to show the boundary changes so as to not excessively delay the incorporation of the CBRS boundary change into the affected FIRM panel(s). Delays incurred to include the CBRS boundary changes into an ongoing map update shall be acceptable, however, if the revision is solely to remove areas from the System.

2.2.4.3 Separate Physical Map Revision

When the area to be revised is too large to be accomplished by a LOMR and when there are no ongoing map updates for the affected FIRM panels, a separate PMR must be processed to reflect the CBRS boundary changes. As discussed above, FEMA may also choose the PMR processing option when areas being added to the System are too large to show on a LOMR attachment.

The processing Mapping Partner shall direct all questions or problems concerning the delineation of CBRS boundaries to the FEMA PO or his/her designee.

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2.2.5 Historical Dates

The following is a historical summary of significant dates in the history of the CBRS:

October 1, 1982 Passage of the Coastal Barrier Resources System Act (Public Law 97-348). The effect of this Act was to establish the CBRS and to provide a 1-year grace period during which communities could prepare for the Federal flood insurance funding prohibitions that would go into effect with publication of the Flood Insurance Rate Maps (FIRMs) 1 year later on October 1, 1983.

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October 1, 1983 **Prohibition Date.** All Coastal Barrier units established with the passage of the Coastal Barrier Resources System Act of 1982 were mapped and finalized on FIRMs dated October 1, 1983.

November 16, 1990 **Prohibition Date.** Passage of the Coastal Barrier Improvement Act (Public Law 101-591). The effect of this Act was to significantly enlarge the CBRS and to impose Federal insurance and funding prohibitions for new construction or substantial improvements within units added to the CBRS on and after November 16, 1990. This Act also established the addition of specific public lands designated as Otherwise Protected Areas (OPAs) 1 year after passage of the Act; provided for minor and technical boundary modifications within two years from the date of enactment; and provided for a periodic (every 5 years) review of and adjustments to CBRS and OPA boundaries to account for subsequent physiographic changes.

June 6, 1991 *Federal Register* notice of availability of CBRS maps showing the changes made under Public Law 101-591.

November 16, 1991 **Prohibition Date.** Date on which Federal flood insurance prohibitions were applied to public lands designated as OPAs. The only prohibition that applies in an OPA is Federal flood insurance for new construction or substantial improvements that occur after that date, with specific and limited exceptions.

October 23, 1992 **Prohibition Date.** Passage of Public Law 102-440 (the "Wild Exotic Bird Conservation Act"). Section 303 of Public Law 102-440 modified the boundaries of OPA unit NC-01P to only include lands owned by the Audubon Society and to change the designation of this unit from OPA unit NC-01P to CBRS unit NC-01, modified the boundaries of OPA unit NC-05P to only include lands owned by the State of North Carolina, and modified the boundaries of the southern segment of OPA unit VA-60P and redesignated part of OPA unit VA-60P as CBRS unit VA-60.

November 15, 1993 **Prohibition Date.** Publication of the *Federal Register* that provided notification of the changes made under Section 4(e) of Public Law 101-591. This section of Public Law 101-591 was established to allow for minor and technical boundary modifications subsequent to the passage of the Coastal Barrier Improvement Act. This *Federal Register* also provided notification of the availability of revised CBRS maps showing the changes made under Section 303 of Public Law 102-440.

November 2, 1994 Passage of Public Law 103-461, effecting changes to several CBRS and OPA units. The changes under Section 1 of this law, which involved mostly minor exclusions from the System, removed properties that were developed prior to 1982 and were erroneously included in the CBRS. The units affected by these changes are as follows: NY-75, VA-62P, FL-05P, P11A, FL-15, FL-36P, P17, P17A, P18P, P19P, FL-72P, P31P, FL-95P, AL-01P, and MI-21.

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February 23, 1995 **Prohibition Date.** Publication in the *Federal Register* of the availability of CBRS maps showing the changes made under Section 1 of Public Law 103-461. Although most changes under this act involved minor exclusions from the System, there were small areas added, thus the new prohibition date.

May 24, 1996 Passage of Public Law 104-148, which resulted in a reduction to OPA unit NY-59P to remove privately held lands.

October 9, 1996 Passage of Public Law 104-265, effecting a reduction to CBRS unit SC-01 to remove developed properties.

November 12, 1996 Passage of Public Law 104-333, effecting changes to several Florida CBRS and OPA units. The units affected by these changes are as follows: P05, P05A, P10, P11, P11A, P18, P25, P32, and P32P.

February 24, 1997 **Prohibition Date.** Publication in the *Federal Register* of the notice that finalized changes to the CBRS resulting from a 5-year review/update of CBRS and OPA unit boundaries provided for in Section 4(c) of Public Law 101-591. The intent of these changes was to keep the CBRS current with the physiographic changes that occur in coastal areas. The following units were affected by these changes: ME-17, ME-18, MA-03, C01B,

MA-20P, MA-24, C28, C31, D02B, NY-04P, NY-50, F10, NJ-09, MD-03, MD-37P, MD-38, VA-09, VA-23, VA-36, L07, L09, P16, P17, FL-89, FL-99, FL-101, Q01A, and VI-07.

April 18, 1997 Publication in the *Federal Register* of the availability of CBRS maps showing the changes made under Section 2 of Public Law 104-148 and Section 201 of Public Law 104-265.

May 28, 1997 Publication in the *Federal Register* of the availability of CBRS maps showing the changes made under Section 220 of Public Law 104-333.

March 5, 1998 Notification by the U.S. Federal District Court of the District of Columbia that the boundary changes made by Public Law 104-333 were invalidated subsequent to a successful challenge being brought before the Court.

October 21, 1998 **Prohibition Date.** Passage of Public Law 105-277, which reinstated the changes made by Public Law 104-333 that were invalidated on March 5, 1998. Public Law 105-277 also effected other minor changes to the CBRS in South Carolina and Florida. Section 335 of Public Law 105-277 reinstated the changes made by Public Law 104-333 for the following units: NY-75, VA-62P, FL-05P, P11A, FL-15, FL-36P, P17, P17A, P18P, P19P, FL-72P, P31P, FL-95P, AL-01P, and MI-21. Section 101(e) of this law revised CBRS units FL-35 and SC-03 and OPA unit FL-35P to remove developed properties from the System. Section 134 of Public Law 105-277 changed the southern and western boundary of CBRS unit M09 back to the boundary established in 1982.

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August 2, 1999 Publication in the *Federal Register* of the availability of CBRS maps showing the changes made under Public Law 105-277.

November 29, 1999 **Prohibition Date.** Passage of Public Law 106-116, which replaced 7 maps relating to the System with 14 new maps. These changes affected CBRS unit L03 and OPA unit NC-03P. CBRS unit L03 was changed to meet the original intent of Congress, and OPA unit NC-03P was changed to coincide with the boundary of the Cape Hatteras National Seashore.

December 6, 1999 **Prohibition Date.** Passage of Public Law 106-128, which revised OPA unit DE-03P to add State parkland to the OPA and remove privately owned land outside the park.

December 9, 1999 Passage of Public Law 106-167, which redesignated the CBRS as the "John H. Chafee Coastal Barrier Resources System."

April 4, 2000 Publication in the *Federal Register* of the availability of CBRS maps showing the changes made under Section 1(a) of Public Law 106-116 and Section 1(a) of Public Law 106-128.

October 19, 2000 Passage of Public Law 106-332, which clarified the boundaries of National Audubon Society lands that CBRS unit NC-01 was intended to mirror.

October 27, 2000 Passage of Public Law 106-360, which clarified the boundaries of Cayo Costa State Park and resulted in changes to CBRS unit P19 and OPA unit P19P.

November 13, 2000 Passage of Public Law 106-514, the Coastal Barrier Resources Reauthorization Act of 2000, which notably mandates a pilot project to convert a number of the CBRS maps to digital format.

February 16, 2001 Publication in the *Federal Register* of the availability of CBRS maps showing the changes made under Section 1 of Public Law 106-332 and Section 1 of Public Law 106-360.

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2.2.6 Database Control

A Mapping Partner selected by FEMA shall maintain the national CBRS database. The designated Mapping Partner shall update the database whenever a revision to a FIRM panel containing CBRS units is processed. All such changes to the database shall be reported to the Mapping Partner assigned to the maintenance of the database. The database is made available on the NFIP website and as such shall be updated monthly and forwarded to the NFIP Bureau and Statistical Agent. The database will be provided to the NFIP Bureau and Statistical Agent in a variety of data formats for downloading from the website. The protocol to be followed by the Mapping Partner assigned to this task for monthly database translations is provided below.

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On the first business day of each month, the designated Mapping Partner shall send a WinZip file to a designated individual at the NFIP Bureau and Statistical Agent via e-mail. The WinZip file shall consist of the latest version of the CBRS database in Excel, Lotus 123, Quattro Pro, ASCII, Access, and dBase formats. The designated Mapping Partner shall follow the procedures below when creating the file translations.

<u>Quattro Pro and Lotus 123 Files</u>

1. Open the Excel file entitled cbrsdata.xls.
2. Save the file as a WQ1 (Quattro Pro) with the same prefix, cbrsdata.
3. Save the file as a WK4 (Lotus 1-2-3) file with the same prefix, cbrsdata.

<u>ASCII Files</u>

1. Open the Excel cbrsdata.xls file.
2. From the File menu, select “Save As”.
3. From the “Save As” type: drop-down menu, choose Text (OS/2 or MS-DOS) (*.txt) and then click Save.

Access File

1. Open a new database file in Access by selecting "Blank Database" from the startup screen.
2. Name the new Access file with the prefix cbrsdata.
3. Click "New" and then click "OK" for the datasheet view option from the Tables tab on the new database screen.
4. From the File menu, choose "Get External Data" and then click "Import."
5. Choose "Microsoft Excel" from the Files type menu.
6. Locate the Excel cbrsdata.xls file and select it for import.
7. Select "Show Worksheets" and then click "Next."
8. Select "First Row Contains Column Headings" and then click "Next."
9. Select "In a New Table" and then click "Next."
10. Choose "No Primary Key" from the next screen and then click "Next."
11. Click "Finish."

dBase File

1. Open the newly created Access file.
2. From the File menu, click "Save As/Export"
3. Click "OK" on the next screen.
4. Select "dBase IV (*.dbf)" from the "Save as Type" drop-down menu on the next screen
5. Change the file name to cbrsdata.

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The designated Mapping Partner shall place all of the above file translations on a WinZip file entitled cbrsdata.zip and send the file to the current e-mail address contact for the NFIP Bureau and Statistical Agent.

[February 2002]

2.2.7 Work to be Performed

The tasks to be performed by the designated Mapping Partner include, but are not limited to, the following:

- Obtaining copies of printed FIRMs and FIRM artwork;
- Reviewing lists of active studies and restudies to determine whether the necessary revisions to CBRS unit maps can be combined with current map actions;
- Preparing the map layout and performing all manual or digital cartographic work associated with showing new boundaries and screens of CBRS boundaries from the CBRS maps on the affected FIRM panels;
- Performing a detailed quality control review of all existing and revised CBRS boundaries on the FIRM panels being revised;

- Preparing correspondence to notify affected communities of the revisions being made;
- Preparing camera-ready artwork for submittal to GPO; and
- Providing review copies of the revised FIRM panels to the USFWS

[February 2002]

2.2.8 Source Materials

Delineation of CBRS units on the FIRM shall be based on the congressionally adopted CBRS source maps produced by the U.S. Department of the Interior (DOI), which will be supplied to the Mapping Partner by the FEMA PO or his/her designee. These maps, hereinafter referred to as "System maps" were produced by the USFWS from a set of maps adopted by the U.S. Congress pursuant to the Coastal Barrier Improvement Act of 1990 and amended as new legislation warrants.

In addition, a set of maps prepared in 1988 by the DOI entitled "*Report to Congress: Coastal Barrier Resources System, Recommendations for Additions to or Deletions from the Coastal Barrier Resources System*" (U.S. Department of the Interior, 1988.) will be available to the designated Mapping Partner for reference purposes only. These maps show what was provided to the U.S. Congress when the 1990 Act was pending. They portray the 1982 extent of the CBRS and clearly define the recommended changes. Although these maps shall not be used by the Mapping Partner for the delineation of CBRS units, they are useful in determining the original extent of 1982 CBRS units and the recommended changes.

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2.2.9 Mapping Specifications

The designated Mapping Partner shall ensure that the mapping specifications summarized in Subsections 2.2.9.1 through 2.2.9.5 are applied to the revised FIRM panels.

[February 2002]

2.2.9.1 Coastal Barrier Resources System Boundaries and Delineations

The CBRS boundaries and delineations that are to be included on the revised FIRM panels are summarized below.

Existing 1983 CBRS Boundaries

Existing 1983 Barriers may appear more detailed on the FIRM than the Barrier delineation shown on the System maps. This does not mean that the existing Barrier has been redelineated. It is more likely that the difference between the System map and the FIRM is due to the difference in source maps used to delineate Coastal Barriers in 1983.

CBRS Unit Boundaries versus Houses

The System maps show direct horizontal relationships between existing houses and the CBRS unit boundaries; these relationships shall be maintained. Most often, the Coastal Barrier boundary has been delineated to keep existing homes out of the designated Coastal Barrier.

CBRS Unit Boundaries versus Linework Features

The System maps use thick lines to represent CBRS unit boundaries. Although standard cartographic practice is to follow the center of a boundary, if the boundary has a direct relationship with a linework feature (such as being against the edge of a road), the Mapping Partner shall be careful to maintain that relationship, even if it means the edge of the boundary line shown on the System map will be used.

Existing Floodplain Boundaries

CBRS boundaries have no direct relationship to existing floodplain boundaries. Any appearance as such shall be questioned.

Boundary Lines Between Contiguous CBRS Units of Different Classifications

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Boundary lines must be shown to differentiate between contiguous Barriers of different classifications, because each CBRS classification carries a different insurance prohibition. This also means that same-screen Barriers will be shown bisected by a boundary line if the Barriers on either side of the line have a different insurance prohibition date.

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Note: See the information in Subsections 2.3.9.4 and 2.3.9.5 of these Guidelines regarding the map screens and the number of CBRS notes to use.

Boundaries of Enlarged CBRS Units

If an existing CBRS unit is enlarged, the enlarged area will be considered on the System maps to be a part of the same unit. Therefore, boundaries between, for example, 1991 and 1993 OPAs of the same unit number will not be shown on the System maps. However, these boundaries must be shown on the FIRM panels to differentiate between the different years of identification for each area (as a result of the different insurance prohibitions unique to each area).

Boundary Lines Between Contiguous CBRS Units With the Same Prohibition Date

There are several occasions where CBRS units with different unit numbers are contiguous to each other on the CBRS maps; the same holds true for OPA units with different numbers. The designated Mapping Partner shall ensure that the FIRM, however, does not show a boundary line between different CBRS or different OPA units if they carry the same prohibition date.

Inaccurate CBRS Unit Delineations

Any problems with the Coastal Barrier delineation on the FIRM panels as compared to the System maps shall be corrected, and FEMA shall inform the USFWS of all such changes.

Errors on 1983 FIRMs

There will be occasions where a 1982 Coastal Barrier unit was inadvertently omitted from the 1983 FIRM because the Coastal Barrier screen was not extended past the shoreline to the full extent of the Special Flood Hazard Area (SFHA) zone screen or the 1982 Coastal Barrier was missed when the Barriers were first mapped. When this occurs, the designated Mapping Partner shall show the addition as a 1982 Coastal Barrier, not a 1990 (or later) Coastal Barrier.

[February 2002]

2.2.9.2 Flood Insurance Rate Map Index

For the 1982 Coastal Barrier FIRM revisions, a map note appeared on the FIRM Index, which itemized the CBRS panels. Use of this note was discontinued until 1996, when it was reinstituted by FEMA. Therefore, the designated Mapping Partner shall add the following note above the FIRM Index title block and north arrow for any community that contains Coastal Barrier units.

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- NOTE -
Designated Coastal Barriers are
located on panels [*panel numbers*]

All printed and non-printed panels shall be listed. Non-printed panels will be footnoted with "Panel Not Printed."

[February 2002]

2.2.9.3 Reason for Revision Notes in Flood Insurance Rate Map Legend

For guidance on the proper revision note to be used in the FIRM Legend, the designated Mapping Partner shall follow Table 2-1. The proper note to be used depends on whether CBRS areas and/or OPAs are being added to, or removed from, the community. Only one of the notes shown shall be used for any given community, so it must reflect the community as a whole. These revision notes shall not to be panel-specific. They shall reflect the action taken for the entire subject jurisdiction.

[February 2002]

Table 2-1. Coastal Barrier Revision Notes

Revision Note	Barrier Added	Barrier Removed[1]	OPA Added	OPA Removed[1]
To add Coastal Barrier Resources Areas	X			
To remove Coastal Barrier Resources Areas		X		
To modify Coastal Barrier Resources Areas	X	X		
To add Otherwise Protected Areas			X	
To remove Otherwise Protected Areas				X
To modify Otherwise Protected Areas			X	X
To add Coastal Barrier Resources Areas and Otherwise Protected Areas	X		X	
To add Coastal Barrier Resources Areas and to remove Otherwise Protected Areas	X			X
To add Coastal Barrier Resources Areas and to modify Otherwise Protected Areas	X		X	X
To remove Coastal Barrier Resources Areas and to add Otherwise Protected Areas		X	X	
To remove Coastal Barrier Resources Areas and Otherwise Protected Areas		X		X
To remove Coastal Barrier Resources Areas and to modify Otherwise Protected Areas		X	X	X
To modify Coastal Barrier Resources Areas and to add Otherwise Protected Areas	X	X	X	
To modify Coastal Barrier Resources Areas and to remove Otherwise Protected Areas	X	X		X
To modify Coastal Barrier Resources Areas and Otherwise Protected Areas	X	X	X	X

[1]This refers to any area, regardless of size, that has had the CBRS unit reduced in size in any area.

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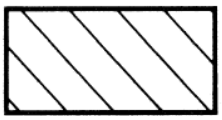
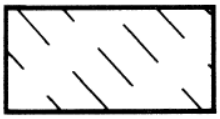
2.2.9.4 Map Screens

Although several different types of Coastal Barriers exist, only two map screens are to be used. Coastal Barriers shall be portrayed with the two map symbols shown below to differentiate between CBRS and OPA units, which contain differing prohibitions. The CBRS and OPA prohibition dates (i.e., the date that the CBRS or OPA area was originally designated) shall be shown within each separate CBRS and OPA unit to assist map users in determining the proper insurance prohibition date for each unit.



CBRS unit



OPA unit

For FIRMs prepared after 1991 and prior to November 2000, the following three map screens shall be used to reflect the three classifications of CBRS units:

1983
Coastal Barriers

1990 or later
Coastal Barriers

1991 or later
Otherwise Protected Areas

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Specifications for the CBRS screens and a graphic representation of the CBRS screens are provided in Appendix K of these Guidelines. The Mapping Partner shall not terminate CBRS screens at the shoreline unless the shoreline is coincident with the Barrier or OPA boundary. The Mapping Partner shall extend the boundary into the open water to the edge of the SFHA screen. The open-water extent of Coastal Barrier or OPA boundaries and cross-hatching on a FIRM panel also shall not extend beyond the SFHA screen unless the Coastal Barrier boundary is closed on the CBRS map.

[February 2002]

2.2.9.5 Map Notes

The designated Mapping Partner shall ensure that the correct map notes appear on the revised FIRM panels as discussed below.

Title Block Notes

The following Coastal Barrier note shall appear on the FIRM panel title block of all new or revised CBRS panels:

-NOTE-

THIS MAP INCORPORATES APPROXIMATE BOUNDARIES OF COASTAL BARRIER RESOURCES SYSTEM UNITS AND/OR OTHERWISE PROTECTED AREAS ESTABLISHED UNDER THE COASTAL BARRIER IMPROVEMENT ACT OF 1990 (PL 101-591).

Subsequent to the passage of Public Law 101-591, several changes to the CBRS units have occurred. These changes are itemized above in Subsection 2.3.5. If the map panel contains a Coastal Barrier established under an act subsequent to Public Law 101-591, the designated Mapping Partner shall modify the note that is placed in the FIRM title block to include the subject public law. One such example is provided below.

-NOTE-

THIS MAP INCORPORATES APPROXIMATE BOUNDARIES OF COASTAL BARRIER RESOURCES SYSTEM UNITS AND/OR OTHERWISE PROTECTED AREAS ESTABLISHED UNDER THE COASTAL BARRIER IMPROVEMENT ACT OF 1990 (PL 101-591) AND/OR THE WILD EXOTIC BIRD CONSERVATION ACT OF 1992 (PL 102-440).

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General Map Note

Old CBRS FIRM panels may contain a general map note in the body of the FIRM panel similar to the note that is now placed in the FIRM title block. If any such general map notes exist from the previous effective FIRM, the designated Mapping Partner shall remove them.

Coastal Barrier Identification Notes

Three different Coastal Barrier identification notes may appear on the FIRM: 1983 Coastal Barriers, 1990 or later Coastal Barriers, and 1991 or later Otherwise Protected Areas. The designated Mapping Partner shall use the correct note for each barrier type and insert the proper insurance prohibition date as appropriate. Specifications for the use of an abbreviated note with a special Coastal Barrier Legend are provided below.

1983 Coastal Barrier Note:

FLOOD INSURANCE NOT AVAILABLE FOR STRUCTURES NEWLY BUILT OR SUBSTANTIALLY IMPROVED ON OR AFTER OCTOBER 1, 1983, IN DESIGNATED COASTAL BARRIERS.

1990 or Later Coastal Barrier Note:

FLOOD INSURANCE NOT AVAILABLE FOR NEW CONSTRUCTION OR SUBSTANTIALLY IMPROVED STRUCTURES ON OR AFTER (date), IN DESIGNATED COASTAL BARRIERS.

1991 or Later Otherwise Protected Area Note:

FLOOD INSURANCE NOT AVAILABLE FOR STRUCTURES - NEWLY BUILT OR SUBSTANTIALLY IMPROVED ON OR AFTER (date) - NOT USED IN A MANNER CONSISTENT WITH THE PURPOSE OF THE OTHERWISE PROTECTED AREAS.

Number of Notes to Use

Before 1994, FEMA specifications required that each FIRM panel carry a minimum of one Coastal Barrier identification note for each Coastal Barrier classification present on the FIRM panel. No requirement to label each separate Coastal Barrier within a given classification of Coastal Barrier existed. If, for example, several 1991 OPAs were on a FIRM panel, only one of them had to be labeled, because only one map screen and prohibition date per Coastal Barrier classification existed. For the 1994 CBRS revisions, FEMA began to use the same map screens to represent Coastal Barriers with different prohibition dates on the affected FIRM panels. Therefore, all separate barrier areas on a FIRM shall be labeled with one of the Coastal Barrier identification notes shown above. The only distinction between many of the Barriers on the FIRM panel will be the specific Coastal Barrier identification note.

Location of Coastal Barrier Notes

The designated Mapping Partner shall locate the Coastal Barrier and OPA notes, whenever possible, on or near the land area, and shall not overprint existing base or floodplain features. If the designated Mapping Partner cannot locate the note on the land area due to space and clarity considerations, the designated Mapping Partner shall place the note in the open water within the Coastal Barrier or OPA screen, near the land area. If the note cannot be placed within the Coastal Barrier or OPA screen without creating overprints, the designated Mapping Partner shall add a leader from the note to the land area.

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Alternate Coastal Barrier Labeling

For digital FIRMs with three or more different Coastal Barrier Identification notes and for those manually produced FIRMs where excessive clutter would result from labeling all Barriers, the designated Mapping Partner shall use the following alternate Barrier labels:

COASTAL BARRIER IDENTIFIED (*DATE*) (SEE COASTAL BARRIER LEGEND)	OTHERWISE PROTECTED AREA IDENTIFIED (*DATE*) (SEE COASTAL BARRIER LEGEND)

When this procedure is used, the designated Mapping Partner shall label all Barriers on the FIRM panel in this fashion. This will involve retrofitting existing Barrier labels (from the previous edition of the FIRM) to conform to the alternate labeling procedure. In addition, when this procedure is used, the designated Mapping Partner shall place a special coastal barrier legend in the body of the map for single-border FIRMs, and in the left-hand border on double-border FIRMs. This legend will show the entire CBRS map note for each classification of Coastal Barrier present on the FIRM panels.

For manually produced FIRMs, the designated Mapping Partner shall ensure that the Coastal Barrier legend contains the entire CBRS map note for only those Barriers present on the FIRM panel in question. For digital FIRMs, the Coastal Barrier legend will contain the entire CBRS map note for all Barriers on all FIRM panels (to avoid having to create multiple legends). An example of the Coastal Barrier legend may be found in Appendix K of these Guidelines.

Coastal Barrier Coordinator Note

The designated Mapping Partner shall add a note to each CBRS FIRM to refer map users to the Regional Coastal Barrier Coordinator at the USFWS. The note reads as follows:

> **Comments or concerns regarding the Coastal Barrier Resources System or Otherwise Protected Areas should be directed to the Coastal Barrier Coordinator at the U.S. Fish and Wildlife Service; (_ _ _) _ _ _-_ _ _ _.**

The phone number shall be inserted into the above note as follows:

(413) 253-8657	CT, DE, MA, ME, MD, NJ, NY, RI, VA
(404) 679-7106	AL, FL, GA, LA, NC, PR, SC, VI
(612) 713-5350	MI, MN, OH, WI
(505) 248-6454	TX

The designated Mapping Partner shall place the note in the body of the FIRM panel close to the CBRS units. If the abbreviated Coastal Barrier notes and special Coastal Barrier Legend are used, this note shall appear below the Coastal Barrier Legend. (See Appendix K for specific presentation information.)

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Regulatory Floodway Note

If the Coastal Barrier or OPA screen happens to overlap an area of regulatory floodway on a FIRM, both the regulatory floodway screen and the Coastal Barrier screen shall be shown. If the designated Mapping Partner believes that it may be unclear to users that the area within the regulatory floodway is also a Coastal Barrier, the Mapping Partner shall add a leader with the following note to the area of overlap:

THIS AREA IS CONTAINED WITHIN THE
COASTAL BARRIER RESOURCES SYSTEM

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2.2.10 Miscellaneous Requirements

2.2.10.1 Letters of Map Revision

If a LOMR was issued to revise an effective FIRM panel, the changes effected by the LOMR shall be included on the revised FIRM. The following standard LOMR addition note shall be used in the FIRM Legend: "To incorporate previously issued Letters of Map Revision."

[February 2002]

2.2.10.2 Flood Insurance Study Report

The designated Mapping Partner shall not revise the FIS report for revisions performed solely to add, remove, or revise Barriers. For FIS reports that are being prepared to reflect other map updates, the designated Mapping Partner shall add standard CBRS paragraphs in Section 3.0 (Insurance Applications) of the FIS report to explain the CBRS. (See Appendix J of these Guidelines for specific information on the CBRS standard paragraphs.)

[February 2002]

2.2.10.3 Community Notification

The designated Mapping Partner shall prepare Proof Copies of revised FIRM panels and transmit them to the community CEO and floodplain administrator for revisions that are processed solely for the addition, deletion, or modification of Coastal Barriers. The Mapping Partner shall transmit the Proof Copies of the revised FIRM panels with a standard transmittal letter provided by FEMA HQ indicating that the subject FIRM will be revised in 6 months to show CBRS revisions that cannot be appealed. For these types of revisions, when the final reproduction materials are complete, the designated Mapping Partner shall replace the standard (179-series) transmittal letter to the CEO of the community with a special Coastal Barrier transmittal letter.

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2.2.10.4 U.S. Fish and Wildlife Service Review Comments

The USFWS has been given a 30-day review period to ensure that the Coastal Barriers are properly mapped. The designated Mapping Partner shall provide Proof FIRM panels of the CBRS revisions to the USFWS at the beginning of the 30-day review period and shall coordinate with the USFWS at the end of the 30-day review period to ensure proper inclusion of changes noted by the USFWS.

[February 2002]

2.2.10.5 Coastal Barrier Unit Numbers

CBRS and OPA units are numbered, and these numbers may be found on the System maps. A single letter (e.g., C14) precedes the 1983 CBRS unit numbers. New 1990 or later units (not OPAs) are preceded by the two-letter State abbreviation and will also include a hyphen (e.g., TX-05 for a Texas unit). The 1991 or later OPAs are always followed by a “P” (e.g., C14P or TX-05P). These CBRS and OPA unit numbers shall not appear on the FIRM panels.

[February 2002]

2.3 Notice-to-User Revisions

The intent of a Notice-To-User revision is to quickly and inexpensively address a nontechnical problem with a published FIS report, FIRM, or FBFM. These types of revisions are intended solely to correct an incorrect or omitted component and cannot be used to establish new or revised flood hazard information.

[February 2002]

2.3.1 Types of Incorrect or Omitted Components

The errors or omissions that can be corrected using the Notice-to-User revision process include, but are not limited to, the following:

- Typographic errors in BFEs shown on FIRM;
- Missing tables included in the FIS report;
- Incorrect entries in the tables included in the FIS report;
- Incorrect map scale shown on the FIRM and/or FBFM panels;
- Incorrect flood insurance risk zone labels shown on the FIRM panels;
- Incorrect or missing flood insurance risk zone screens on the FIRM and/or FBFM panels;
- Addition or correction of Corporate Limits shown on the FIRM and/or FBFM panels;
- Addition or correction of Township, Range, and Section lines on the FIRM and/or FBFM panels;
- Errors in Bench Marks or Elevation Reference Marks on the FIRM and/or FBFM panels; and
- Missing Elevation Reference Mark descriptions on the FIRM and/or FBFM panels.

When Notice-to-User revisions are completed, the affected FIS report, FIRM panels, and/or FBFM panels normally will receive a new effective date. However, FEMA may make exceptions on a case-by-case basis. For example, when a required correction is discovered shortly before or after the effective date of the item to be corrected, FEMA may decide to reissue the component (FIRM panel for example) without a revised date; this decision will be made by the FEMA PO.

[February 2002]

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2.3.2 Identification of Incorrect or Omitted Component

The incorrect component may be identified by FEMA or by one of FEMA's Mapping Partners. FEMA's decision regarding whether to use the Notice-To-User processes to address the error or omission shall be based on the answers to the following questions:

- What is the specific error or omission?
- How long has the component been in effect?
- How was the error or omission identified?
- Who is requesting the correction?
- How many copies of the component has FEMA printed and distributed?
- Are any revisions to the defective component ongoing or planned?

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2.3.3 Options for Correction

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When an error or omission is brought to the attention of FEMA, FEMA will select the proper course of action to take based on the criteria listed in Subsection 2.3.1. The following correction options are considered:

- Correction via a PMR;
- Correction via LOMR;
- Correction via a Notice-to-User revision; or
- Deferral of the correction.

FEMA will base its decision on which of these processes shall be used on the relative priority assessed during the identification process. The FEMA PO will make the decision on the appropriate correction process. The PMR and LOMR processes are discussed in Subsections 2.1 and 2.4, respectively. The process to be followed when the Notice-to-User revision process is chosen is discussed in Subsection 2.3.4.

[February 2002]

2.3.4 Processing Protocol for Notice-to-User Revisions

Once the Notice-to-User revision process has been chosen to address the identified error or omission, the Mapping Partner selected by FEMA to process the revision (hereinafter referred to as the processing Mapping Partner) shall proceed as follows:

[February 2002]

2.3.4.1 Research and Coordination

During the research and coordination phase of the Notice-to User revision process, the processing Mapping Partner shall:

- Determine if any previously issued LOMCs are to be reissued or incorporated into the component revision.

- Obtain FEMA PO approval of the action taken and document the decision in the Mapping Partner Monitoring Report.

- Inform the MSC of the action being taken and the timeframe for submission of the corrected component (accelerated nature of correction process requires advance coordination to ensure timely printing and delivery to FIS report, FIRM, and FBFM users).

- Contact the FEMA RO to determine if the community is already compliant or if the community requires a compliance period. If the community has model ordinances that specify that they will adopt all future revisions of the FIS report, FIRM, and FBFM then the Notice-to-User revision may be accelerated. If the community requires a compliance period to adopt new ordinances, FEMA will send a letter to the community CEO and floodplain administrator informing them of the need for the revision and the effective date for the new or revised component.

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2.3.4.2 Product Revision

During the product revision phase of the Notice-to User revision process, the processing Mapping Partner shall:

- Make the necessary corrections to the FIS report, FIRM, and/or FBFM.

- Determine, after consultation with the FEMA PO, if the new corrected component will have a new effective date or will be issued with the same date as currently exists.

Because it is advantageous to have the FIS report carry the same date as the FIRM Index and individual FIRM panels, the FIS report may be reissued with the same effective date and a

notation that it is being reissued on [date] with corrections. When this option is chosen, the processing Mapping Partner shall ensure that the Notice to Users page in the front of the FIS report contains a brief description of the reason for revision. A sample of this paragraph follows:

Notice To Users:

> This Flood Insurance Study report was reissued on June 11, 1999, to add the Floodway Data Table for the Allegheny River, which was inadvertently omitted from the FIS report printed on March 22, 1999.

A sample FIS report cover showing this is presented in Figure 2-2.

2.3.5 Preparation of the Notice-to-User Letter

Normally, FEMA will send a Notice-to-User letter to all individuals on the MSC distribution list to explain why a revised component is being issued. The Notice-to-User letter, prepared for FEMA by the processing Mapping Partner, shall have the following components:

- Name of community;
- Community Identification Number;
- Date;
- Description of the corrected component; and
- FEMA signature.

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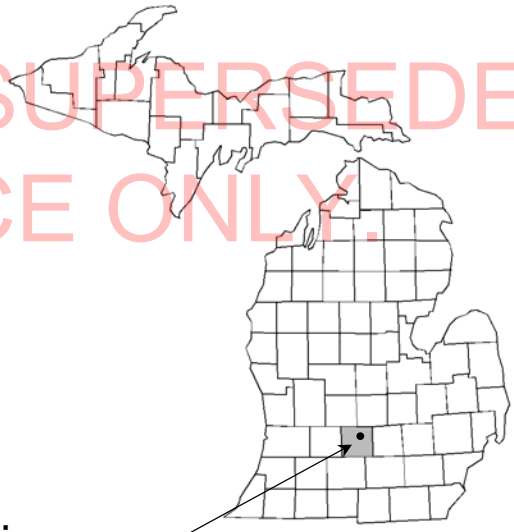
CHARTER

TOWNSHIP OF

DELTA, MICHIGAN

EATON COUNTY



Charter Township of Delta

REVISED:
JUNE 2, 1999
(Reprinted with corrections on November 22, 1999)

Federal Emergency Management Agency

COMMUNITY NUMBER – 260066

Figure 2-2. Sample FIS Report Cover

2.3.6 Submittal to the Map Service Center

The processing Mapping Partner shall submit the corrected component(s) to the MSC. The MSC will coordinate with GPO, which will then print and distribute the component(s) to all individuals that previously received a copy of the product that contained the error or omission. In addition to the corrected component, the processing Mapping Partner also shall submit the following items to the MSC a minimum of 2 months before the new effective date:

- Notice-to-User letter, signed by FEMA, that takes the place of the standard 179 letter;
- Community Map Action (CMA) list; and
- Appropriate GPO paperwork.

The processing Mapping Partner shall contact the MSC to determine the requirement for providing copies of the signed letter or a digital copy for their reproduction purposes.

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2.4 Letter of Map Change Processing

2.4.1 Conditional Letters of Map Amendment

The processing procedures presented in Subsection 2.4.2 of these Guidelines for LOMAs also shall apply to requests for Conditional Letters of Map Amendment (CLOMAs), with the following exceptions:

- Because CLOMAs are based on proposed construction, as-built information is not required.
- The CLOMA Comment Documents that are issued by FEMA do not amend the effective Flood Hazard Boundary Map (FHBM) or FIRM.
- A review and processing fee must be submitted for CLOMA requests, but not for LOMA requests.

CLOMA requesters shall submit CLOMA requests, including the required review and processing fee, to the appropriate processing Mapping Partner address for the FEMA region in which the property that is the subject of the request is located. The addresses are provided in the application/certification forms package, referred to as MT-1, that must be used in preparing a CLOMA request for submittal. The MT-1 application/certification forms package is available for viewing or download at http://www.fema.gov/mit/tsd/dl_mt-1.htm. The processing Mapping Partner shall review requests for CLOMAs in accordance with Parts 70 and 72 of the NFIP regulations. Additional information regarding the processing of CLOMAs is provided in Section 3 and Appendix C of the FEMA *Document Control Procedures Manual* (FEMA, July 2000) and in Chapter 8 of FIA-12, *Appeals, Revisions, and Amendments to National Flood Insurance Program Maps: A Guide for Community Officials* (FEMA 1993).

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2.4.2 Letters of Map Amendment

Letter of Map Amendment (LOMA) requesters shall submit LOMA requests to the appropriate processing Mapping Partner address for the FEMA region in which the property that is the subject of the request is located. The addresses are provided in the MT-1 application/certification forms package, which must be used in preparing a LOMA request for multiple lots and/or multiple structures. The MT-1 application/certification forms package is available for viewing or download at http://www.fema.gov/mit/tsd/dl_mt-1.htm. For single-lot/single-structure requests, LOMA requesters may use the MT-EZ form, which is available for viewing or download at http://www.fema.gov/mit/tsd/dl_mt-ez.htm.

[February 2002]

2.4.2.1 Receipt and Acknowledgment

The requester will direct most LOMA requests to the processing Mapping Partner selected by FEMA to process LOMA requests through the address that appears in the MT-1 forms package. FEMA staff shall forward LOMA requests and accompanying data submitted directly to the FEMA RO or HQ to the processing Mapping Partner. The processing Mapping Partner shall process requests for LOMAs in accordance with Part 70. Additional information regarding the processing of LOMAs is provided in Section 3 and Appendix C of the FEMA *Document Control Procedures Manual* (FEMA, July 2000) and in Chapter 7 of FIA-12, *Appeals, Revisions, and Amendments to National Flood Insurance Program Maps: A Guide for Community Officials* (FEMA, 1993)

Upon receipt of a LOMA request and supporting data, the processing Mapping Partner shall record the requester's name, the community name, the property in question, the date of the request, and the date that the request was received in an in-house MIS or other database management system. The Mapping Partner shall establish a case number and case file for each request; the case file shall contain a summary sheet, a contact sheet, and records of all other contacts pertinent to the case, as well as a compilation of all case-related information. Eventually, this file shall include dated copies of any FEMA correspondence and all subsequent actions. Documentation in the case file shall be up-to-date and accurate, and the processing Mapping Partner shall maintain and store all LOMA files.

THIS DOCUMENT IS SUPERSEDED.

The processing Mapping Partner shall perform an initial review of the requester's submittal to determine if information and all application/certification forms necessary to make a determination have been provided. Within 3 days of receipt of the request, the Mapping Partner shall prepare and mail a letter to the requester acknowledging receipt of the request.

FOR REFERENCE ONLY.

[February 2002]

2.4.2.2 Required Supporting Information

The Mapping Partner shall review the information submitted by the requester to determine whether it is sufficient to make a determination. Requesters must supply information as explained in the MT-EZ form (for single lot/structure LOMAs) or the MT-1 application/certification forms package. This information includes, but is not limited to, the following:

1. Property description documentation consisting of either a copy of the Plat Map or Deed (containing the recorder's stamp and recordation date) accompanied by a tax assessor's map or other suitable map showing the surveyed location of the property. The recordation data (e.g., Book, Volume, Page, Reel, Document Number, Date) must be evident on the copies of these documents so that FEMA may cite the legal description of the property in the Determination Document. In addition, FEMA must be able to identify the property exactly. If the property is not recorded on a Plat Map, a copy of a tax assessor's map or other suitable map must be submitted to aid FEMA in locating the property.

2. A photocopy of the effective FHBM or FIRM (and FBFM, if applicable) panel, annotated to show where the property is located. The panel number and effective date of the FHBM, FIRM, or FBFM panel must appear on the copy submitted. The actual map or a photographic copy must be used. A reproduction from a photocopy is unacceptable due to possible distortion.

3. An Elevation Form, Form 2 of the MT-1 application/certification forms package, or an Elevation Certificate must be included for all requests, **except** requests for determinations in which the FHBM or FIRM already shows the subject property to be CLEARLY located outside the SFHA.

The processing Mapping Partner shall request any additional information required by telephone and by letter, and shall notify the requester that all necessary information to process a request must be received within 90 days of the date of the letter requesting the required information. If all information is not received within the 90-day period, the Mapping Partner shall suspend processing of the case.

[February 2002]

2.4.2.3 Technical and Programmatic Review

THIS DOCUMENT IS SUPERSEDED. FOR REFERENCE ONLY.

After receiving the necessary information, the processing Mapping Partner shall make a determination concerning the property (i.e., legally defined parcel(s) of land or structure(s)) by comparing ground and/or structure elevation data with the base flood depth or BFE at the site in question. The extent of the work required for the processing Mapping Partner to make the determination will normally depend on the number of structures or lots involved and whether an approximate or detailed analysis was performed for the SFHA in which the property is located.

Approximate Analysis

For a LOMA request involving an SFHA determined by approximate-study methods and designated as Zone A on the effective FHBM or FIRM, the requester may provide data to substantiate a BFE from an authoritative Federal source (e.g., U.S. Army Corps of Engineers [USACE], U.S. Geological Survey [USGS], Natural Resources Conservation Service [NRCS]) or an authoritative State/Commonwealth source (e.g., Department of Natural Resources [DNR], Department of Environmental Quality [DEQ], Department of Transportation [DOT]). Other sources for obtaining BFEs include local Planning and Zoning or Building Departments, or a Registered Professional Engineer. BFEs supplied by the other (non-Federal or non-State) sources must include supporting technical information (i.e., hydraulic and hydrologic data). Requests for property greater than 50 lots or 5 acres, whichever is lesser, must include a BFE in accordance with Paragraph 60.3(b)(3) of the NFIP regulations.

When a requester provides a BFE, the processing Mapping Partner shall review the supporting information in light of the data used to prepare the FHBM or FIRM to verify that the BFE provided by the requester is reasonable. Providing a BFE is the responsibility of the requester. When the requester does not have the technical resources and/or the ability to provide a BFE, the

processing Mapping Partner shall contact the PO or his/her designee to determine whether the processing Mapping Partner may determine the BFE using the best available information.

Detailed Analysis

For a LOMA request involving an SFHA that was determined using detailed study methods and shown on an effective FIRM as Zone A1-30, AE, AO, or AH, the processing Mapping Partner shall make a determination using the BFE or base flood depth shown in the Summary of Elevations Table or Flood Profiles from the FIS report or the BFE shown on the FIRM. Requests based on BFEs or base flood depths that differ from those shown on the effective FIRM may not be handled under the LOMA process. Such requests must be processed as a request for a LOMR or PMR under Part 65 of the NFIP regulations.

Restrictions

LOMAs may not be issued or based on preliminary study, restudy, or map revision data; however, BFE data may be used from these sources if it is the best available. LOMAs may not be issued for properties or structures located in coastal high hazard areas (Zone V) or in alluvial fan flood hazard areas (Zone AO, (depth and velocity specified), or Zone A, AH, or AO (Active or Inactive Alluvial Fan Flooding)) or areas protected by levees that have not been recognized by FEMA as providing base flood protection. Requests of this nature will be considered LOMR or PMR requests and evaluated appropriately. LOMAs also may not be issued for structures elevated on posts, piers, or pilings if any portion of the structures, including a post, pier, or piling, is below the BFE.

THIS DOCUMENT IS SUPERSEDED.
FOR REFERENCE ONLY.

[February 2002]

2.4.2.4 Document Preparation

The processing Mapping Partner shall prepare the LOMA determination document based on the results of the evaluation of the submitted data, usually, but not always, using automated software provided by FEMA and developed using Microsoft Access. In some cases a manual determination will be necessary. Structures may be determined to be in or out of the SFHA; lots may be determined to be entirely in, partially in, or entirely out of the SFHA. The determination shall include the flood risk zone designation.

Procedures for the preparation and content of LOMAs are presented in Section 3 and Appendix C of the FEMA *Document Control Procedures Manual* (FEMA, July 2000).

When directed by the PO or his/her designee, the processing Mapping Partner also shall prepare informational letters that provide FEMA's best estimate of the BFE in an SFHA.

[February 2002]

2.4.2.5 Other Coordination and Documentation Activities

The processing Mapping Partner shall perform the required coordination and documentation activities for processing each determination request. During the processing, the Mapping Partner shall communicate with the requester, as necessary; coordinate activities with FEMA; communicate with other Mapping Partners and Federal, State, and local agencies, as needed; prepare letters and other correspondence for FEMA signature; maintain legal documentation and records of correspondence and technical data; and provide inventory lists, status reports, and other information to the PO, or his/her designee, as required.

[February 2002]

2.4.2.6 Deliverable Products

Following the preparation of the LOMA determination document, the processing Mapping Partner shall include the LOMA in the list of determinations that is to be sent to FEMA for official approval. Following approval, the processing Mapping Partner shall provide the requester with FEMA's final determination for all property covered by the request. The processing Mapping Partner also shall send a copy of the LOMA determination document to the community as verification of the amendment to the FIRM.

[February 2002]

THIS DOCUMENT IS SUPERSEDED.
FOR REFERENCE ONLY.

2.4.3 Conditional Letters of Map Revision Based on Fill

The processing procedures presented in Subsection 2.4.4 LOMR-Fs also shall apply to requests for Conditional Letters of Map Revision Based on Fill (CLOMR-Fs); however, because CLOMR-Fs are based on proposed construction, as-built information is not required. CLOMR-Fs do not revise the effective FIRM.

The processing Mapping Partner shall process reviews of requests for CLOMR-Fs in accordance with Parts 65 and 72 of the NFIP regulations. Additional information regarding the processing of CLOMR-Fs is provided in Section 2 and Appendix B of the *Document Control Procedures Manual* (FEMA, July 2000).

[February 2002]

2.4.4 Letters of Map Revision Based on Fill

2.4.4.1 Receipt and Acknowledgment

Most LOMR-F requests will be submitted directly to the processing Mapping Partner by the requester. Requests for LOMR-Fs and any accompanying data received by FEMA RO and HQ staff shall be transmitted to the processing Mapping Partner.

Upon receipt of a request, the processing Mapping Partner shall:

- Record the requester's name, the community name, the property in question, the date of the request, and the date the request was received.

- Assign a case number and create a case file for each request; the case file shall contain a summary sheet, a contact sheet, and records of all other contacts pertinent to the case, as well as a compilation of all case-related information. Eventually, this file shall include dated copies of any FEMA correspondence and all subsequent actions. Documentation in the case file shall be kept up-to-date and accurate and the Mapping Partner shall maintain and store all LOMR-F files.

- Perform an initial review of the requester's submittal to determine if all information, review and processing fee, and application/certification forms necessary to make a determination have been provided.

- Within 3 days of receipt of the request, prepare and mail a letter acknowledging receipt of the request.

[February 2002]

2.4.4.2 Required Supporting Information

THIS DOCUMENT IS SUPERSEDED. FOR REFERENCE ONLY.

The processing Mapping Partner shall review the information submitted by the requester to determine whether it is sufficient to make a determination. All requests for LOMR-Fs must be supported by sufficient information to demonstrate that structures or the entire area within the legal bounds of a parcel of land, having been elevated by fill, are at or above the BFE and are not subject to inundation by the base flood. This information, as explained in the MT-1 application/certification forms package, includes, but is not limited to the information summarized below.

1. Property description documentation consisting of either a copy of the Plat Map or Deed (containing the recorder's stamp and recordation date) accompanied by a tax assessor's map or other suitable map showing the surveyed location of the property. The recordation data (e.g., Book, Volume, Page, Reel, Document Number, Date) must be evident on the copies of these documents so that FEMA may cite the legal description of the property in the Determination Document. In addition, FEMA must be able to identify the property exactly. If the property is not recorded on a Plat Map, a copy of a tax assessor's map or other suitable map must be submitted to aid FEMA in locating the property.

2. A photocopy of the effective FHBM or FIRM and FBFM (if applicable) panel, annotated to show where the property is located. The panel number and effective date of the FIRM must appear on the copy submitted. The actual map or a photographic copy must be used. A reproduction from a photocopy is unacceptable due to possible distortion.

3. An Elevation Form, Form 2 of the MT-1 application/certification forms package, or Elevation Certificate must be included for all requests, except requests for determinations in which the FIRM already shows property to be CLEARLY outside the SFHA.

4. Community Acknowledgement, Form 3 of the MT-1 application/certification forms package, which the request meets the criteria described in Paragraph 65.5(a)(4) of the NFIP regulations. These requirements include:

   a. Existing residential structures built in the SFHA have their lowest floor elevated to or above the BFE;

   b. The participating community has determined the land and any existing or proposed structures to be removed from the SFHA are "reasonably safe from flooding," and that they have on file, available upon request by FEMA, all supporting analyses and documentation used to make that determination;

   c. The participating community has issued permits for all existing and proposed construction or other development;

   d. All necessary permits have been received from those governmental agencies where approval is required by Federal, State, or local law; and

   e. Fill has not been placed in a regulatory floodway, which causes a rise in flood elevations associated with the base flood discharge.

5. Appropriate review and processing fee, as published in Part 72 of the NFIP regulations

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The processing Mapping Partner shall request any additional information required by telephone and by letter, and shall notify the requester that all necessary information to process a request must be received from the requester within 90 days of the date of the letter requesting the required information. If all information is not received within the 90-day period and the requester does not request an extension, the processing Mapping Partner shall suspend processing of the case.

[February 2002]

2.4.4.3 Technical and Programmatic Review

After receiving the necessary information, the processing Mapping Partner shall make a determination concerning the property or structure by comparing fill and/or structure elevation data with the 1-percent-annual-chance (100-year) flood depth or elevation at the site in question. The extent of the work required for the processing Mapping Partner to make a determination will usually depend on the number of structures or lots involved and whether the SFHA in which the structures are shown was determined based on an approximate or detailed analysis.

Approximate Analysis

For a LOMR-F request involving an approximate SFHA shown on an effective NFIP map (i.e., Zone A), the requester may provide data to substantiate a BFE from an authoritative Federal source (e.g., USACE, USGS, NRCS) or State source (e.g., DNR, DEQ, DOT). Other sources for obtaining BFEs include local Planning and Zoning or Building Departments, or a Registered Professional Engineer. BFEs supplied by the other (non-Federal or non-State) sources must include supporting technical information (i.e., hydraulic and hydrologic data). Requests for property greater than 50 lots or 5 acres, whichever is lesser, must include a BFE, in accordance with Paragraph 60.3(b)(3) of the NFIP regulations.

When a requester provides a BFE, the processing Mapping Partner shall review the supporting information in light of the data used to prepare the FHBM or FIRM to verify that the BFE provided by the requester is reasonable. Providing a BFE is the responsibility of the requester. When the requester does not have the technical resources and/or the ability to provide a BFE, the Mapping Partner shall contact the PO or his/her designee to determine whether the Mapping Partner should determine the BFE using the best available information.

Detailed Analysis

For a LOMR-F request involving a detailed SFHA shown on an effective FIRM, the processing Mapping Partner shall make a determination using the BFE or base flood depth shown in the Summary of Elevations Table or Flood Profiles from the FIS report or the BFE shown on the FIRM. Requests based on BFEs or base flood depths that differ from those shown on the effective FIRM may not be handled under the LOMR-F process; rather, they must be addressed under the LOMR or PMR processes discussed earlier in Section 2.

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Restrictions

LOMR-Fs may not be issued or based on preliminary study, restudy, or map revision data, however, BFE data may be used from these sources if it is the best available. LOMR-Fs may not be issued for properties or structures located in coastal high hazard areas (Zone V), alluvial fan flood hazard areas (Zone AO (depth and velocity specified), or Zone A, AH, or AO (Active or Inactive Alluvial Fan Flooding)) or areas protected by levees that have not been recognized by FEMA as providing base flood protection. LOMR-Fs also may not be issued or structures elevated on posts, piers, or pilings, if any portion of the structure, including a post, pier, or piling, is still below the BFE.

[February 2002]

2.4.4.4 Document Preparation

The processing Mapping Partner shall prepare the LOMR-F determination document based on the results of the evaluation of the submitted data, using usually, but not always, automated software provided by FEMA and developed using Microsoft Access. In some cases a manual determination will be necessary. This letter always shall be addressed to the CEO of the

community, with copies transmitted to the requester (if different from the CEO), the community floodplain management administrator, and the State Coordinator, as applicable. Structures may be conditionally (CLOMR-Fs) or finally (LOMR-Fs) determined to be in or out of the SFHA; lots may be conditionally or finally determined to be entirely in, partially in, or entirely out of the SFHA. The determination shall include the revised flood risk zone designation. Procedures for the preparation and content of CLOMR-Fs and LOMR-Fs are provided in Section 2 and Appendix B of the FEMA *Document Control Procedures Manual* (FEMA, July 2000).

When directed by the PO or his/her designee, the Mapping Partner also shall prepare informational letters that provide FEMA's best estimate of the BFE in approximate and detailed SFHAs.

[February 2002]

2.4.4.5 Other Coordination and Documentation Activities

The processing Mapping Partner shall perform the required coordination and documentation activities for processing each LOMR-F or CLOMR-F request. During the processing, the processing Mapping Partner shall communicate with the requester, as necessary; coordinate activities with FEMA; communicate with other Mapping Partners and Federal, State, and local agencies, as needed; prepare letters and other correspondence for FEMA signature; maintain legal documentation and records of correspondence and technical data; and provide inventory lists, status reports, and other information to the PO or his/her designee, as required.

THIS DOCUMENT IS SUPERSEDED.

[February 2002]

FOR REFERENCE ONLY.

2.4.4.6 Deliverable Products

Following the preparation of the LOMR-F, the processing Mapping Partner shall prepare a list of LOMR-Fs and other Letter of Map Change (LOMCs) to be sent to FEMA for approval. This list is referred to as a docket. The LOMR-F documents provide the requester with FEMA's final determination for each property covered by the request. The CLOMR-F documents provide the requester with a conditional determination for each property covered by the request. Following receipt of the approved docket from FEMA, the Mapping Partner shall send copies of the LOMR-F or CLOMR-F determination documents to the community CEO and floodplain administrator and to requesters. Additional information on the distribution of LOMR-Fs and CLOMR-Fs is provided in Section 3 and Appendix C of the FEMA *Document Control Procedures Manual* (FEMA, 2000)

[February 2002]

2.4.5 Conditional Letters of Map Revision (CLOMR)

The processing procedures presented in Subsection 2.4.6 for LOMRs also shall apply to requests for CLOMRs. Per Section 65.5 of the NFIP regulations, a CLOMR is

> FEMA's comment on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective base flood elevations, or the Special Flood Hazard Area (SFHA).

A CLOMR **does not** revise the effective FIS report, FIRM, or FBFM; however, the CLOMR does describe changes to the effective FIS report, FIRM, or FBFM that will result from the project, if built as proposed. The CLOMR also describes any additional information (e.g., as-built plans, fill compaction certification) required to process the final determination as a PMR or LOMR.

For communities that propose floodplain modifications, requesting CLOMRs is not only prudent but, in some circumstances, required by FEMA (Section 65.12 of the NFIP Regulations). When a participating community proposes to permit an encroachment into its 100-year floodplain where no floodway has been established, and the encroachment will cause an increase of more than 1.0 foot in the BFE, the community must first obtain FEMA's conditional approval of the proposed encroachment through submission of a CLOMR. Similarly, the community must also obtain conditional approval from FEMA before permitting an encroachment into a regulatory floodway that would result in any increases to flood levels.

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The main difference between the types of supporting data required for LOMRs and CLOMRs is that any maps, plans drawings, measurements, or ground elevation data submitted in support of a request for a CLOMR will not reflect existing conditions and consequently cannot be certified "as-built." All data submitted in support of a request for a CLOMR must, however, reflect final design conditions.

The requester should not interpret the lack of a requirement for certified as-built supporting data to mean that incomplete data and vague descriptions of proposed projects will provide FEMA with an adequate basis for a conditional determination. In addition, although an "as-built" certification would not apply to design plans and other supporting data for a CLOMR, all submitted work maps and plans must still be stamped and signed with the seal of a Registered Professional Engineer or Licensed Land Surveyor, as appropriate.

Standard data requirements for CLOMRs are as follows:

- Hydraulic modeling analysis of the floodplain and floodway (as appropriate) of all flood frequencies listed in the communities Flood Insurance Study (FIS). Separate hydraulic analysis must be submitted duplicating the effective model and documenting proposed conditions though submission of a proposed conditions model. To document any physical changes within a community's floodplain since the effective model it may be

necessary to also provide an existing conditions model to accurately show the effects of a proposed project on a community's flood levels.

- Certified, dated, topographic work map, depicting scale, model cross-sections and contour interval (contour interval should be equivalent to or more detailed than that used to develop community's FIS) delineating the 1-percent-annual-chance (100-year) and 0.2-percent-annual-chance (500-year) floodplain and regulatory floodway boundaries (as appropriate).

- A copy of the community's FIRM (panel number and effective date must be included in copy) annotated to reflect the proposed 1- and 0.2-percent-annual-chance floodplain and regulatory floodway boundaries (as appropriate).

- All appropriate completed application/certification forms including community concurrence of proposed revision.

For request that incorporate revised hydrologic data, flows for all flood flow frequencies listed in the community's FIS must be submitted. Per Part 65.6 of the NFIP regulations, it must be demonstrated to FEMA that revised flows are "statistically significantly" different from the effective flows as measured by a confidence limits analysis of the new discharge estimates for effective flows to be revised. Application/certification form 3 (MT-2 Form 3) must be submitted in support of request including revised hydrologic analyses.

THIS DOCUMENT IS SUPERSEDED. FOR REFERENCE ONLY.

The processing Mapping Partner shall process reviews of requests for CLOMRs in accordance with the provisions of Parts 65 and 72 of the NFIP regulations and the procedures discussed below. Additional information regarding processing of CLOMRs is provided in Section 2 and Appendix B of *Document Control Procedures Manual* (FEMA, July 2000).

[February 2002]

2.4.6 Letters of Map Revision Based on Conditions Other Than Fill

2.4.6.1 Receipt and Acknowledgment

All map revision requests and any accompanying data will be transmitted to the processing Mapping Partner by the PO or his/her designee or other FEMA staff. The processing Mapping Partner shall

- Inform the PO or his/her designee of any requests for information submitted directly to the processing Mapping Partner.

- Inventory the materials received and, within 5 working days of receipt, send acknowledgment letters to the CEO of the community. If the requester is anyone other than the CEO, the Mapping Partner shall send the requester a copy of the acknowledgment letter and, if necessary, telephone the requester to explain the review procedures.

In accordance with Section 65.4 of the NFIP regulations, all requests for changes to effective maps other than those initiated by FEMA must be made in writing by the CEO of the community. The processing Mapping Partner shall request community concurrence if the CEO has not submitted it.

[February 2002]

2.4.6.2 Case Initiation

Upon receipt of the revision request, the processing Mapping Partner shall

- Assign a case number;
- Create a revision case file (see Appendix F), in accordance with Section 66.3 of the NFIP regulations;
- Telephone the community to obtain general information (name and address of the CEO and community contact person, and location of community map repository) and, for PMRs, to request an updated community corporate limit map;
- Enter the revision request into an in-house MIS and the LOMC module of the FEMA CIS database
- Make an initial determination as to the expected processing procedure; and
- Record the date of receipt as the date from which all required processing dates are determined.

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FOR REFERENCE ONLY.

[February 2002]

2.4.6.3 Initial Reconnaissance

After the case has been properly recorded, the processing Mapping Partner shall begin a search of all available records to determine the status of the community in the NFIP and to determine any and all past actions by FEMA in the community that may affect the request. The processing Mapping Partner shall determine whether all data required to address the request have been submitted, advise the PO or his/her designee of the results of this review, and make a recommendation concerning follow-up. The PO or his/her designee shall make the final decision on how to proceed with the request.

[February 2002]

2.4.6.4 Program Status and Map Actions

The processing Mapping Partner shall review various portions of FEMA's databases (i.e., CIS, Monitoring Information on Contracted Studies (MICS), Map Needs Update Support System (MNUSS)) to determine the status of the community in the NFIP and obtain information on

complete, active, and future required restudies, map revisions, and map amendments. The Mapping Partner also may use the *NFIP Community Status Book*, available in hardcopy form from the MSC or from the Mitigation Library on FEMA's Internet site, to determine whether the community is participating in the Emergency or Regular Phase of the NFIP. The processing Mapping Partner shall review the following data sources to obtain more detailed information on the nature and extent of any past map actions in the community:

- **Future Revision Files**—The Mapping Partner shall review these files to determine if additional revisions to the FIS report, FIRM, or FBFM are warranted. These files exist because, from time to time, information is submitted by the community or discovered during the course of processing a restudy or map revision that does not significantly affect the community's participation in the NFIP. Because of funding constraints, these revisions are deferred for future action and, at the request of the PO or his/her designee, placed in the future revision files. These files also include LOMRs and LOMR-Fs for future PMRs.

- **LOMA and LOMR-F Files**—The Mapping Partner shall review these files to determine if past LOMA and LOMR-F actions are of sufficient scope to warrant inclusion in the ongoing revision. In general, single-lot LOMAs and LOMR-Fs do not warrant inclusion because of map scale limitations. However, multiple-lot LOMAs and LOMR-Fs may warrant inclusion in a PMR.

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- **Five-Year Map Update Files**—As with the Future Revision Files, the Mapping Partner shall review these files to determine if additional revisions to the FIS report, FIRM, or FBFM are warranted.

FOR REFERENCE ONLY.

[February 2002]

2.4.6.5 Required Data

Based on the reason for the request, the processing Mapping Partner shall make a determination as to the need for additional data in accordance with the applicable portions of Sections 65.5, 65.6, 65.7, 65.10, 65.11, 65.12, and 65.13 of the NFIP regulations. As part of the revision package, the requester is required to complete the application/certification forms included in the MT-2 application/certification forms package. Examples of standard data requirements for various structural modifications include, but are not limited to, the following:

Channelizations

- Certified as-built construction or grading plans

- Hydrologic analysis (if the discharges in the effective model are not used)

- Calibration run duplicating original hydraulic model (multiple profile and floodway)

- Existing hydraulic model (multiple profile and floodway) if the calibration hydraulic model run does not reflect the floodplain conditions prior to the start of the project

- Revised hydraulic model (multiple profile and floodway)
- Floodplain and/or floodway boundary delineations on the effective map panels
- Transition structure design plans for as-built conditions
- New hydrologic analyses or diversion channels
- Evidence of adequate soil compaction and erosion protection (for placement of fill)
- Certified topographic data that include the entire area of the revision and delineate floodplain and/or floodway boundaries, BFEs, and cross-section locations

Culverts and Storm Systems

- Certified as-built construction plans
- Hydrologic analysis (if the discharges in the effective FIS report are not used)
- Calibration run duplicating the original hydraulic model (multiple profile and floodway)
- Existing hydraulic model (multiple profile and floodway) if the calibration hydraulic model run does not reflect the floodplain conditions prior to the start of the project
- Revised Hydraulic Model (multiple profile and floodway) and the determination of headwater and tailwater elevations
- Floodplain and/or floodway boundary delineations on the effective map panels
- Evidence of adequate soil compaction and erosion protection (for placement of fill)
- Certified topographic data that include the entire area of the revision and delineate floodplain and/or floodway boundaries, BFEs, and cross-section locations

THIS DOCUMENT IS SUPERSEDED.
FOR REFERENCE ONLY.

Bridges

- Certified as-built construction plans
- Hydrologic analysis (if the discharges in the effective model are not used)
- Calibration run duplicating the original hydraulic model (multiple-profile and floodway)
- Existing hydraulic model (multiple profile and floodway) if the calibration hydraulic model run does not reflect the floodplain conditions prior to the start of the project
- Revised hydraulic model (multiple profile and floodway)

- Evidence of adequate soil compaction and erosion protection (for placement of fill)
- Certified topographic data that include the entire area of the revision and delineate floodplain and/or floodway boundaries, BFES, and cross-section locations

Levees (Dikes, Berms, and Embankments)

- Certified as-built construction plans
- Hydrologic analysis (if the discharges in the effective model are not used)
- Hydraulic model with levee if compliant with Section 65.10 of the NFIP regulations
- Hydraulic models with and without levee if not compliant with Section 65.10 of the NFIP regulations
- Evidence of structural stability, certified by a Registered Professional Engineer,
- Evidence of operation and maintenance provisions
- Interior drainage analyses and SFHA boundary delineations
- Floodplain and/or floodway boundary delineations on the effective FIRM/FBFM panels
- Evidence of adequate soil compaction and erosion protection (for placement of fill)
- Certified topographic data that include the entire area of the revision and delineate floodplain and/or floodway boundaries, BFEs, and cross-section locations
- Additional design data as necessary

THIS DOCUMENT IS SUPERSEDED.
FOR REFERENCE ONLY.

Dams (Detention Basins and Reservoirs)

- Certified as-built construction plans
- Hydrologic analysis (if the discharges in the effective FIS report are not used)
- Certification by a Registered Professional Engineer that impoundment structures will remain stable during the base flood
- Evidence of operation and maintenance provisions
- Hydraulic analysis
- Floodplain and/or floodway boundary delineations on the effective FIRM/FBFM panels

- Hydrologic analyses for downstream reach, if the dam is designed to lower the base flood discharge

- Evidence of adequate soil compaction and erosion protection (for placement of fill)

- Certified topographic data that include the entire area of the revision and delineate floodplain and/or floodway boundaries, BFEs, and cross-section locations

Flood-Control Structures Subject to Alluvial Fan Flooding

- Certified as-built construction plans

- Certification by a Registered Professional Engineer that the flood-control structures will be able to withstand the hazards associated with flooding, erosion, scour, and relocation of flow paths during the base flood discharge

- Hydrologic analyses that quantify the discharges (if the discharges on which the effective FIRM is based are not used) and the volumes of water, debris, and sediment movement

- Engineering analyses demonstrating the impact of flooding from sources other than the fan apex

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- Revised analysis of alluvial fan flooding (if the analysis on which the effective FIRM is based is not used), in accordance with the analysis approach stated in Appendix G accompanied by a discussion of the effects of (1) the depth and velocity of flooding, and (2) the scour and sediment deposition on other areas of the fan

- Evidence of operation and maintenance provisions

- Revised floodplain boundary delineations on the affected panels of the effective FIRM

- Topographic data that include the entire area of the revision and delineation of the revised floodplain boundaries (certified, if the topographic data on which the effective FIRM is based are not used)

- Evidence of maintenance provisions, where referenced above, are to be in the form of an ordinance that specifies the activities to be performed, the frequency of performance, and the community officials responsible for the performance. If maintenance is to be accomplished by an agency other than the community, a logical provision (e.g., ordinance) for community monitoring and backup maintenance is required. The Mapping Partner shall ensure that maintenance agreements are submitted for levees and dams.

Certifications, where referenced above, are defined as follows:

- Certification of data is a statement that the data are accurate to the best of the certifier's knowledge.

- Certification of analyses is a statement that the analyses have been performed correctly and in accordance with sound engineering practices.

- Certification of structural works is a statement that the works are designed in accordance with sound engineering practices to provide protection from the base flood.

- Certification of as-built conditions is a statement that a structure has been built according to the plans being certified, is in place, and is fully functional.

The processing Mapping Partner shall ensure that certifications include the certifier's name, signature, registration number, and the registration expiration date of the certifier.

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2.4.6.6 Technical Review

The processing Mapping Partner shall review the technical, scientific, and other information submitted by the revision requester to ensure that the data are technically accurate, consistent with standard engineering practice and FEMA standards, and sufficient to warrant a revision. The extent of the technical review will, generally, be limited to a review of the information presented on the application/certification forms and the supporting documentation submitted with them.

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The processing Mapping Partner shall use the forms to identify inconsistencies and discrepancies and judge reasonableness. In certain cases, such as review of requests involving alluvial fan flooding, unique hydrologic or hydraulic analyses, or significant changes to the SFHAs shown on the effective FIRM, additional technical reviews beyond the reviews of the application/certification forms may be required, as directed by the PO or his/her designee.

For revisions involving the addition of detailed flood information or changes to flooding sources originally studied by detailed methods, analyses and other supporting data for the 10-percent-annual-chance (10-year), 2-percent-annual-chance (50-year), 1-percent-annual-chance (100-year), and 0.2-percent-annual-chance (500-year0 floods and regulatory floodway may be required. At a minimum, the analyses and other supporting data provided in support of a revision request must meet the original standards employed by FEMA for the preparation of the FIS report, FIRM, and FBFM, which are documented in Volume 1 and related appendices in these Guidelines.

Hydrologic Analyses

FEMA requires that the computations performed to support requests for revisions to effective FIS reports, FIRMs, and FBFMs be based on the flood discharge values used for the effective FIS and FIRM; however, revision requests may also be based on new hydrologic conditions or better estimates of the flood discharges. The requester must provide 5- and 95-percent confidence limits in support of new discharge values, when applicable. The requester must not only provide sufficient data to support the use of the new discharges for the 100- and, if necessary, 10-, 50-, and 500-year floods, but must also determine all changes to the FIS report,

FIRM, and FBFM that would result from the use of the new discharges. Therefore, the requester will usually be required to provide hydraulic analyses and revised floodplain and floodway boundary delineations, in addition to hydrologic analyses.

When new discharges are used, the processing Mapping Partner shall review the information presented on Form 2, entitled "Riverine Hydrology and Hydraulics Form," included in the MT-2 package to determine if the discharges are reasonable and adhere to the requirements listed below. The discharge values shall be checked for consistency, within the limitations of the methodology employed, throughout the information submitted by the requester. In performing this check, the processing Mapping Partner shall verify that, for flooding sources studied by detailed methods, adequate information has been provided for any of the four recurrence interval floods that may be affected by the new hydrologic analyses.

The following requirements apply when processing requests involving revised hydrology:

- The revised flood discharge must be significantly different from the effective flood discharge. The revised flood discharge shall be adopted if the effective flood discharge does not fall within the 5- and 95-percent confidence limits of the revised estimates. These limits shall be determined using methods contained in Bulletin 17B, *Guidelines for Determining Flood Flow Frequency* (Interagency Committee on Water Data, 1982).

- In cases where the new discharge must be approved by the State, the Mapping Partner shall ensure that the proper approval from the State has been acquired.

- In cases where the new discharge must be approved by a regional/local flood-control agency, the processing Mapping Partner shall ensure that the proper approval from the regional/local flood-control agency has been acquired.

- An alternative methodology, if used by a revision requester, must meet the requirements of Paragraph 65.6(a)(6) of the NFIP regulations and must be on FEMA's list of accepted computer models.

- The revised hydrologic analyses must analyze the same recurrence interval floods as those studied for the effective FIS.

- The methodology used in the revised hydrologic analyses must match that used for contiguous communities.

- The data accumulated and analyses performed must be certified by a Registered Professional Engineer and submitted to the processing Mapping Partner for review.

- If the processing Mapping Partner believes future-conditions discharges have been used for any revision request and the processing Mapping Partner has not received any guidance from FEMA for the community(ies) affected, the processing Mapping Partner shall discuss the revision request with the PO or his/her designee to determine followup actions to be taken.

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Hydraulic Analyses

The requester must perform hydraulic analyses to support a revision request based on new hydrologic conditions or physical changes in channel or overbank conditions, if those conditions affect the elevation and extent of the base flood. For revisions involving flooding originally studied by approximate methods and designated as Zone A on the effective FIRM, the analyses performed by the requester generally must be consistent with FEMA standards for approximate studies. Therefore, the analyses may be in the form of hand calculations for step-backwater, normal-depth, or stage-frequency relationships, or the analyses may be based on the use of step-backwater or coastal flooding computer programs.

For revisions involving flooding sources studied by detailed methods for the effective FIS, analyses performed by the requester must be consistent with FEMA standards for detailed studies. Therefore, the analysis usually must consist of step-backwater computations for riverine flooding sources, stage-frequency analyses for lacustrine flooding, hand computations for sheetflow areas, and storm-surge and wave-height or wave-runup calculations for coastal flooding.

The processing Mapping Partner technical review shall generally be limited to the information presented on the application/certification forms. The Mapping Partner shall review the forms to ensure that the requirements listed below are met. All data submitted by the requester must be consistent, and there may be no discontinuities between the information shown for revised areas and that shown for unrevised areas in the FIS report and on the FIRM and FBFM.

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The following requirements apply when processing requests involving revised hydraulics:

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- Revision requests must be based on the effective hydraulic computer model. Where the input data representing the effective hydraulic model are unavailable, an approximation should be developed. A new model should be established using the original cross-section topographic information, where possible, and the discharges on which the current FIS report and FIRM are based. The model must use the same effective-flow areas as established in the original analysis and must be calibrated to reproduce the original BFEs to within 0.5 foot. See Appendix C, Subsection C.5.2.1 of these Guidelines for information on FEMA's policy for conversion to HEC-RAS.

- If the revision requester uses an alternative hydraulic methodology, that methodology must be on FEMA's list of acceptable computer models and meet the requirements of Paragraph 65.6(a)(6) of the NFIP regulations.

- To avoid discontinuities between the revised and unrevised flood data, the revision requester must submit hydraulic analyses be that are extensive enough to ensure a logical transition can be shown between the revised flood elevations, floodplain boundaries, and floodway boundaries and those developed previously for areas not affected by the revision. The revised and unrevised water-surface elevations <u>must</u> match within 0.5 foot where such transitions occur; however, FEMA would <u>prefer</u> that the transitions match within 0.10 foot if possible. Exceptions to this standard must be approved by the FEMA PO or his/her designee.

- In general, revision requests that result in increases in BFEs because of the physical actions of an individual property owner within the regulatory floodway will be considered a violation of NFIP regulations unless evidence is provided to show that the criteria described in Section 65.12 of the NFIP regulations have been met. Any violation or potential violation of the NFIP regulations must be brought to the attention of the PO or his/her designee.

- For revisions based on the effects of levees or other flood-control structures that provide base flood protection, the processing Mapping Partner shall obtain verification, in the form of technical analyses, that those structures meet the minimum criteria outlined in Section 65.l0 of the NFIP regulations. Similarly, for flood-control structures located in areas subject to alluvial fan flooding, the processing Mapping Partner shall obtain technical analyses to verify that the minimum criteria of Section 65.13 of the NFIP regulations are met. If a PMR is processed, the processing Mapping Partner shall verify that the effects of such structures are properly discussed in the FIS report and shown on the FIRM and FBFM.

Coastal Revisions

Computation of the SWEL considers many factors and is performed through the use of computer models or statistical analysis of tide gage data of adequate continuous record. Any revision of the SWEL should be based on new information that either refutes or supplements the database. The requester must submit significant data or produce verifiable information that refutes the information used by the SC to construct the applicable computer model.

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In the case of tide gages, the requester must perform a statistical analysis prepared with new data that supplements the existing tide gage records or provides evidence that the data used are incorrect. The processing Mapping Partner shall review the information presented on Form 4, "Coastal Analysis Form," from the MT-2 application/certification forms package to determine the appropriateness of incorporating the revised data on the FIRM.

For map revision requests in coastal areas based on more up-to-date, site-specific topographic information, a transect and a wave-height analysis based on the profile must be provided. This analysis may also require consideration of other coastal processes, such as erosion and wave runup. This analysis may be conducted based on the terms of the effective FIS report and FIRM, the community, or the PO or his/her designee.

Map revisions in coastal areas may also be based on existing, new, or improved shore-protection structures, such as bulkheads, seawalls, breakwaters, and dikes. When structures designed to diminish or absorb wave energy (e.g., breakwaters, bulkheads, seawalls) are involved, the requester must submit evidence that the structure will survive the base flood and associated wave action. The items that the processing Mapping Partner shall address before issuing a map revision based on coastal structures are listed in *Criteria for Evaluating Coastal Flood Protection Structures.* (See Appendix D of these Guidelines.) Structures designed to provide flood protection (e.g., levees, dikes, floodwalls) must conform to Section 65.10 of the NFIP regulations and to the criteria outlined in Section 1 of these Guidelines.

The requester must also provide assurance from the State or local agency with maintenance responsibility that the structures involved in the revision will be maintained and will not settle. As-built drawings of all structures are required. Wave height analyses based on transacts through these types of structures are valid only when these conditions are met.

The processing Mapping Partner shall review the information presented on Form 4, "Coastal Analysis Form," and/or Form 5, "Coastal Structures Form," from the MT-2 application/certification forms package to determine the items that require further review and the appropriateness of incorporating the revised data on the FIRM.

Other Data

Revisions involving changes to flood risk zones, floodplain boundaries, and corporate limits may also be requested. For revisions to flood risk zones, the Mapping Partner shall verify the accuracy of any calculations the requester submitted and determine whether a revision is warranted based on a review of Form 2, entitled "Riverine Hydrology and Hydraulics Form," from the MT-2 application/certification forms package and the supporting documentation. Requests that Zone V or Zone A areas be revised to Zone A or Zone B/Zone X (shaded), respectively, must be supported by hydraulic computations in most cases.

For floodplain boundary revisions based on new or more detailed topographic information, hydraulic analyses are usually not required unless the changes in ground contours have significantly affected the geometry of cross sections used for the effective FIS report and FIRM or have altered effective-flow areas. For revisions involving only floodplain boundaries, the processing Mapping Partner shall review the information described on Form 2, titled "Riverine Hydrology and Hydraulics Form," or Form 4, titled "Coastal Analysis Form," from the MT-2 application/certification forms package to determine whether the requested revisions are acceptable.

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2.4.6.7 Revision Requests Based on Future-Conditions Hydrology

Communities experiencing urban growth and other changes often use future-conditions hydrology in regulating watershed development. While some communities regulate based on future development, others are hesitant to enforce more restrictive standards without FEMA support. To assist community officials, FEMA has decided to include future-conditions flood hazard data on FIRMs and in FIS reports for informational purposes on a case-by-case basis. This decision was documented in a Final Rule published in the *Federal Register* on November 27, 2001. (The Final Rule may be downloaded from the FEMA website at http://www.fema.gov/mit/tsd/frm_fchy.pdf.)

Because multiple options exist for presenting future-conditions floodplains and related data on the FIRM and in the FIS report, interested community officials should contact the appropriate RO to discuss the available options and agree on the approach to be taken. For information on these options, FEMA encourages interested community officials to review the November 27, 2001, Final Rule and the FEMA report entitled "Modernizing FEMA's Flood Hazard Mapping

Program: Recommendations for Using Future-Conditions Hydrology for the National Flood Insurance Program" (FEMA, 2001). That report contains one possible scenario/example of depicting future-conditions flood hazard information on a FIRM and in an FIS report and may be downloaded from the FEMA website at http://www.fema.gov/mit/tsd/ft_futur.htm.

At the request of a community and with the approval of FEMA, FIRMs and FIS reports may include, for informational purposes, flood hazard areas based on projected- or future conditions hydrologic and hydraulic analyses. If community officials request that FEMA show the future-conditions 1-percent-annual-chance floodplain on the FIRM, the future-conditions floodplains and flood insurance risk zone shall be shown on the FIRM and referenced in the accompanying FIS report. Although graphic specifications are flexible for the mapping of this flood insurance risk zone, the zone label will be "Zone X (Future Base Flood)."

The future-conditions flood hazard zone shall be defined in the FIRM legend and in the FIS report as follows:

> Zone X (Future Base Flood) is the flood insurance risk zone that corresponds to the 1-percent-annual-chance floodplains that are determined based on future-conditions hydrology. No BFEs or base flood depths are shown within this zone.

FEMA opted to use the Zone X (shaded) screen, in lieu of a new flood hazard zone designation, to depict the future-conditions 1-percent-annual-chance (100-year) floodplain to minimize confusion by users of the FIRM that make determinations regarding Federal mandatory flood insurance purchase requirements. Those users now recognize that areas designated as Zone X (shaded) are floodprone, but that the mandatory flood insurance purchase requirement does not apply. Because the risk premium rates for buildings located in the future-conditions 1-percent-annual-chance (100-year) floodplain will be the rate comparable to other areas outside the SFHA, FEMA believes designating these areas as "Zone X (Future Base Flood)" will be sufficient distinction.

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FEMA may develop graphic specifications for the presentation of future-conditions flood hazard data on the FIRM and specifications and guidelines for the inclusion of support information in the accompanying FIS report. However, it is FEMA's intent, as indicated in the previously referenced Final Rule, to have flexibility in the implementation of this community-requested mapping option. Because multiple options for presenting future-conditions flood hazard data exist, FEMA intends to work closely with each community to develop the presentation format that best meets community and FEMA needs. For the time being, FEMA, in coordination with the affected community(ies) and the Mapping Partner that is preparing the Preliminary FIRM and FIS report, shall establish the presentation specifications on a case-by-case basis.

Once future-conditions flood hazard data have been included on the FIRM and in the FIS report for a community, all revision submittals shall incorporate the future-conditions data developed by the community. The community is entirely responsible for developing and maintaining this data layer on a digital FIRM.

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2.4.6.8 Reporting and Project Officer Approval

Upon request, the processing Mapping Partner shall advise the PO or his/her designee about the current status of a technical review. When the technical review is complete, the processing Mapping Partner shall discuss the results of the review, any additional data required to support the requested revision, and any problems encountered during the review with the PO or his/her designee. The PO or his/her designee shall direct the processing Mapping Partner to finalize the technical review by one of the following options:

- Requesting, by telephone or letter, additional or revised data to complete the technical review;
- Preparing a LOMR; or
- Preparing a PMR.

For PMRs, the processing Mapping Partner shall issue a letter, referred to as a 316-PMR letter, informing the community CEO and floodplain administrator that a PMR will be prepared and requesting that the community submit any information to be incorporated into the PMR.

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2.4.6.9 Preparation of Letters and Attachments

When processing a LOMR, the processing Mapping Partner shall prepare the letter and attachments (FIRM and/or FBFM panels, Summary of Discharges Table, Floodway Data Table, and/or Flood Profile panels) in accordance with the procedures outlined in the FEMA memorandum dated May 13, 1986, entitled "Policies and Procedures for Flood Map Production Coordination Contractors for Processing Flood Insurance Study Revisions."

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2.4.6.10 Community Review and Comment

Upon completing a LOMR, the processing Mapping Partner shall provide copies of the LOMR to the revision requester and community officials for review and comment. The community shall receive a 30-day review period, for all revisions. When BFEs are changed, a 90-day appeal period shall be required.

<u>30-Day Review Period</u>

Because a LOMR is an official revision of the FIS report, FIRM, and/or FBFM and may become effective immediately, additional changes may be made only through the initiation of another revision; therefore, the PO or his/her designee may determine that such a revision should be deferred. If the changes are significant, a second revision may be warranted.

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90-Day Appeal Period

For LOMRs that involve new or modified BFEs, the processing Mapping Partner shall initiate the statutory 90-day appeal period to provide residents of the affected community an opportunity to appeal the new or modified BFEs. As in the processing of FISs and RFISs, the proposed or proposed modified BFEs must be published in a local newspaper with wide circulation and in the *Federal Register* to initiate the appeal period and must be finalized after the appeal period has elapsed. (Refer to Subsection 1.4 of these Guidelines for the procedures to be followed.). The proposed BFEs must be published in local newspapers on two separate dates, usually 1 week apart. The appeal period begins on the day of the second publication of the proposed BFEs.

Because a revision made by a LOMR becomes effective immediately in cases where the SFHA width and BFEs are decreasing, the appeal period occurs after the effective date of the LOMR. In cases where the BFEs and SFHAs are increasing, however, the LOMR may not be effective until after the appeal period has elapsed unless notification and acceptance are received from all affected property owners.

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2.4.6.11 Proposed and Final Flood Elevation Determinations

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When a 90-day appeal period is required for a LOMR, the processing Mapping Partner shall prepare and process the correspondence for initiating the appeal period and finalizing the new or modified BFEs. The processing Mapping Partner shall prepare the proposed BFE notices for publication in the *Federal Register* and a local newspaper with wide circulation and the final BFE notice for publication in the *Federal Register*, and shall prepare and process the proposed and final BFE determination letters that will be sent to the CEO of the community, the State NFIP Coordinator, and all appellants.

For revisions involving BFEs, the LOMR and the proposed BFE determination letter sent to start the appeal period are the same. The proposed BFE notice shall be prepared using the BFEs shown in the effective FIS report and FIRM, as well as those presented in the revised FIS report and FIRM. The processing Mapping Partner shall ensure that the notices are correct, that they include BFEs for all flooding sources for which revisions were made, and that they are published in a local newspaper with wide circulation and in the *Federal Register*.

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2.4.6.12 Appeals and Protests

Appeals and protests concerning LOMRs may be appealed by the community or affected property owners during the appeal period, but appeals must be submitted to FEMA through the community. The processing Mapping Partner shall review, evaluate, and resolve all appeals submitted in accordance with the procedures outlined in Part 67 of the NFIP regulations and as amplified in *FIA-12*, *Appeals, Revisions, and Amendments to National Flood Insurance Program Maps: A Guide for Community Officials* (FEMA 1993). Appeals may be based only on

information indicating that the proposed revised BFEs are scientifically or technically incorrect. Objections of other kinds are termed protests.

Within 7 days (5 working days) of receipt of an appeal, the processing Mapping Partner shall prepare an appeal acknowledgment letter. The processing Mapping Partner shall then evaluate any data submitted; request any additional data required; perform, upon approval of the PO or his/her designee, any engineering analyses required; prepare and distribute Revised Preliminary copies of the FIS report, FIRM, and/or FBFM, if necessary; and prepare an appeal resolution letter to be sent to the appellant.

Protests shall be handled similarly, but protests will not result in revised BFEs and, generally, will not involve as much work on the part of the processing Mapping Partner.

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2.4.6.13 Coordination and Documentation Activities

The processing Mapping Partner shall perform the required coordination and documentation activities necessary for processing each LOMR. During the processing, the Mapping Partner shall:

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- Communicate with the requester and community, as necessary.
- Coordinate activities with the FEMA RO as directed by the PO or his/her designee.
- Communicate with other FEMA contractors and Federal, State, and local agencies, as needed.
- Prepare letters and other correspondence for FEMA signature.
- Maintain legal documentation, records of correspondence, and technical data.

In addition, the processing Mapping Partner shall organize, and may be required to submit to FEMA, records of the correspondence and supporting data associated with LOMRs. (Refer to Volume 3 of these Guidelines for details.)

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2.5 Revalidation Letters

When a revised FIRM panel becomes effective, all previous map actions for that panel are superseded. Therefore, each time a FIRM panel is physically revised and republished, the panel must be updated to include the changes in flood hazard information resulting from previously issued map actions, including LOMCs. Frequently, the results of a LOMC cannot be shown on a revised FIRM panel due to one or more of the following reasons:

- Map scale limitations;
- Results indicated property outside the SFHA as shown on the previous effective FIRM;
- Flood hazard data that was basis for LOMC determination superseded by new detailed flood hazard data; or
- LOMC issued after LFD date.

To assist communities in maintaining the FIRM and to reflect LOMCs previously issued by FEMA, FEMA developed a process for revalidating LOMCs automatically when a revised FIRM becomes effective. The result of this process is the issuance of a revalidation letter, termed a LOMC-VALID letter.

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2.5.1 Technical and Programmatic Review

The procedures the Mapping Partner assigned by FEMA shall follow for automatically revalidating LOMCs are presented in Subsections 2.5.2, 2.5.3, and 2.5.4. Under these procedures, FEMA issues one letter for all affected LOMAs, LOMR-Fs, and LOMRs rather than an individual letter for each map change request. Individual property owners are no longer *required* to request that LOMCs be reissued. The result is a more effective tool for floodplain management and flood insurance purposes.

As discussed in Subsection 2.1.13, to assist communities in maintaining the NFIP maps, particularly the FIRM, FEMA directs the assigned Mapping Partner to prepare summaries of the LOMAs, LOMR-Fs, and LOMRs that will be superseded when the revised FIRM panel(s) become effective. FEMA provides the resulting SOMAs to the communities at significant milestones during the processing of studies, restudies, and PMRs to make the communities aware of the effect revised FIRM panels will have on previously issued LOMCs. A complete discussion of the requirements for producing SOMAs is provided in Section 10 of the FEMA *Document Control Procedures Manual* (FEMA, July 2000).

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2.5.2 Document Preparation

After reviewing the LOMAs, LOMR-Fs, and LOMRs issued for the affected community, the assigned Mapping Partner shall prepare the LOMC-VALID letter, which includes the following information for each LOMA, LOMR-F, or LOMR:

- Case number (when available);
- Date issued;
- Identifier;
- Map panel number, including suffix; and
- New flood insurance risk zone designation.

Depending on the number of LOMAs, LOMR-Fs, and LOMRs to be revalidated, the assigned Mapping Partner shall include the information for each LOMA, LOMR-F, or LOMR in the LOMC-VALID letter itself or provide it as a separate attachment.

The assigned Mapping Partner shall submit the LOMC-VALID letter to FEMA for review and approval approximately 3 weeks before the new effective date and mail the LOMC-VALID letter to the community CEO and floodplain administrator approximately 2 weeks before the new FIRM effective date.

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If, subsequent to the issuance of the LOMC-VALID letter, a community official or individual property owner requests that a LOMA, LOMR-F, or LOMR be reissued and the LOMA, LOMR-F, or LOMR is listed in the LOMC-VALID letter, the assigned Mapping Partner shall send the requester a copy of the LOMC-VALID letter and, if requested, a copy of the original LOMA, LOMR-F, or LOMR. Again, no fees shall be assessed for these requests. However, subsequent requests for copies from the requester or requests from someone other than a community official or individual property owner shall be subject to the fee schedule for FIS backup data published in the *Federal Register*. (The most recent fee schedule became effective on June 1, 2000.)

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2.5.3 Other Coordination and Documentation Activities

Because the changes made to the effective FIRM via the LOMC process become effective without the affected panel(s) being physically revised and republished, the assigned Mapping Partner must maintain records of these modifications so they may be incorporated into the next physical update of the affected panel(s).

Approximately 1 month before the effective date of the revised map, the assigned Mapping Partner shall generate a list of the LOMAs, LOMR-Fs, and LOMRs that must be revalidated. The list is generated from the final SOMA (see Subsection 2.1.13)

The assigned Mapping Partner shall review the listed LOMAs, LOMR-Fs, and LOMRs to verify that all appropriate letter determinations are included. During the verification process, the assigned Mapping Partner shall assess the pending LOMAs, LOMR-Fs, or LOMRs for possible completion before the new effective date; pending letters that will be completed before the effective date may be revalidated. If necessary, the Mapping Partner shall obtain information from the case file to determine whether a LOMA, LOMR-F, or LOMR must be revalidated.

The intent of the LOMC-VALID letter is to indicate that the new FIRM panels did not affect the previous determination. Therefore, if one of the determinations in a multiple-determination LOMA or LOMR-F is a denial for a certain property, the assigned Mapping Partner will not be required to specify the property that was removed from the SFHA or indicate in any way that the request for a certain property was denied. If the property was subsequently removed from the SFHA, the LOMA, LOMR-F, or LOMR that included that determination also will be revalidated by the LOMC-VALID letter.

If a requester notifies FEMA about one or more LOMAs, LOMR-Fs, or LOMRs that he or she believes should have been revalidated but were not included in a LOMC-VALID letter, the assigned Mapping Partner shall review available information to determine the accuracy of the request. If the assigned Mapping Partner finds that one or more LOMAs, LOMR-Fs, or LOMRs should have been revalidated, the assigned Mapping Partner shall prepare a new LOMC-VALID letter or reissue the original LOMA, LOMR-F, or LOMR. If the assigned Mapping Partner could not locate the LOMA, LOMR-F, or LOMR in question on the FIRM, the Mapping Partner shall request appropriate information from the requester.

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Following the FIRM effective date, the assigned Mapping Partner shall prepare and distribute new amending or revising LOMAs, LOMR-Fs, and LOMRs for those cases in Category 4 of the Final SOMA for which new determinations could be made based on available information.

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2.5.4 Deliverable Products

In preparing the LOMC-VALID letter, the Mapping Partner shall follow the general guidelines below in presenting case-specific information on revalidated LOMCs.

- A panel number must appear for each revalidated LOMR, LOMA, or LOMR-F included in the LOMC-VALID letter. If the FIRM has been reformatted since a LOMR, LOMA, or LOMR-F was issued and the Mapping Partner cannot readily identify the correct panel number, the Mapping Partner shall NOT include the LOMR, LOMA, or LOMR-F in the LOMC-VALID letter.

- If the revalidated letter is a LOMR, the Mapping Partner is not required to include a new flood insurance risk zone.

- If the revalidated letter is a multiple-determination LOMA or LOMR-F and multiple zones are cited in the letter, the word “MULTIPLE” may be included in place of the zone.

- If the new flood insurance risk zone for a revalidated LOMA or LOMR-F is a Zone X and the assigned Mapping Partner can readily determine whether it is Zone X (shaded) or Zone X (unshaded), the Mapping Partner shall include the complete flood insurance risk zone designation in the LOMC-VALID letter. If the Mapping Partner cannot make this determination readily, the term "Zone X" shall be included.

The LOMC-VALID letter is to become effective 1 day after the effective date of the newly effective FIRM panels. The LOMC-VALID letter is considered legally binding, in the same manner as the original LOMA, LOMR-F, or LOMR, provided that a copy of the original LOMA, LOMR-F, or LOMR accompanies the LOMC-VALID letter. If required by the requester, the assigned Mapping Partner shall forward a copy of the original LOMA, LOMR-F, or LOMR with the LOMC-VALID letter. No fee is to be assessed for such requests.

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2.6 Corporate Limit Changes

Corporate limit changes may occur in a community as a result of annexation, incorporation, or other appropriate legal actions. Paragraph 64.4 requires communities to update their ordinance within six months of such an activity, however some communities may not provide this information in a timely manner. Occasionally, communities provide this information with other information they regularly provide FEMA, such as the Biennial Report. Corporate limit change information is forwarded by FEMA to the mapping partner for processing. If the boundary change affects an SFHA, FEMA and its mapping partner need to provide appropriate guidance to the community, identifying the applicable FIRM map and FIS text for the affected area.

If there is an ongoing map action (i.e. restudy, LOMR, or PMR) for the community when the corporate limit changes are submitted, the change information will be incorporated into the study, and no additional response is necessary. However, in the majority of the cases, there is not an ongoing map action when the change is received. The procedures outlined below have been developed to provide guidance for the actions and response to such a corporate limit change submittal. It is unlikely that FEMA would receive change information from a non-participating community, and that issue is not addressed. However, it should be noted that if a non-participating community expands into an area that was previously in a participating community, the situation could result in a PMR and would warrant review by applicable parties on a case-by-case basis.

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2.6.1 Technical and Programmatic Review

The technical review of the data submitted consists of reviewing the corporate limit change submittal for certain information. There are two required items – a complete copy of the corporate limit change ordinance, including the date the change became effective, and a map showing the location and area involved in the change. Usually a letter from a community official is included; this is helpful contact information. If either the map or the ordinance is not submitted, the community should be contacted, and this information should be requested.

When boundary change information is received and determined to be for a community not currently in an ongoing study, its location on the FIRM panel should be reviewed. If the area of change does not include a SFHA, the Standard Response Letter should be sent. The flood hazard information on the FIRM panels for adjacent land areas should be reviewed for consistency. If they are inconsistent, action should be initiated to address the problem. If they are consistent, a letter response is appropriate. The Standard Response Letter can be used in situations where the ordinance level is the same in both impacted communities or where the ordinance level of the community assuming jurisdiction is currently higher than that currently in the affected area.

To resolve inconsistencies, it must first be verified that data is available, and whether that data is available internally or must be requested from the community. If insufficient data are available, the assigned Mapping Partner shall prepare the Standard Response Letter to advise the affected communities that the change will be incorporated into the next revision of that FIRM panel. If

sufficient data are available, the magnitude of the change needs to be considered and, if a map action is determined to be appropriate, whether a LOMR or PMR is to be initiated. LOMRs and PMRs are discussed in Sections 2.1 and 2.2. In such cases, the assigned Mapping Partner shall prepare the Restudy Response Letter to advise the community of the upcoming map action. The ordinance levels are detailed in Paragraphs 60.3(a) through (e) of the NFIP regulations. For the purpose of reviewing corporate limit change materials, a very general overview of the levels of ordinances as they apply to map information follows:

- Paragraph 60.3(a)—No data, no FIRM;
- Paragraph 60.3(a)—FIRM has only Zone A flood hazard information;
- Paragraph 60.3(c)—FIRM shows some BFEs and detailed flood hazard information;
- Paragraph 60.3(d)—FIRM or FBFM shows regulatory floodway information; and
- Paragraph 60.3(e)—FIRM shows coastal high hazard information (V zones).

If a community will be incorporating flood hazard information with the corporate limit change a that will require a higher floodplain management ordinance level, the community will have to upgrade the ordinance. For example, if the changed area includes a regulatory floodway and the panels of the community assuming jurisdiction also have floodway information, then the ordinance of the community will not change, and the Standard Response Letter is appropriate.

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However, if the changed area has a regulatory floodway shown, and the FIRM or FBFM for the community assuming jurisdiction does not show regulatory floodway information, then the community will have to change its floodplain management ordinance to incorporate the requirements of Paragraph 60.3(d) of the NFIP regulations. The community needs to be advised of the change required in their ordinance, and this can be accomplished using the Ordinance Upgrade Response Letter.

The content and distribution requirements for the Standard Response Letter, Restudy Response Letter, and Upgrade Response Letter may be found in next update to the FEMA *Document Control Procedures Manual.*

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2.6.2 Document Preparation

The corporate limit change submittal usually shall include a copy of the ordinance, a map showing the location and area involved in the change, and a letter from a community official. The corporate limit change submittal arrives at the processing Mapping Partner, where it is assigned to a designated Processor for review and processing.

The processing Mapping Partner reviews the submittal for the required materials, specifically for the map and the ordinance, and the FIRM is obtained for the changed area and the community assuming jurisdiction. The following information is noted:

- FIRM panel name and number for the community assuming jurisdiction
- FIRM panel name and number for the changed area's previous community
- The name and title/department of the official of the community assuming jurisdiction– this is the person who wrote the letter accompanying the corporate limit change submittal (if no letter, no name)
- The name and address of the CEO of the community assuming jurisdiction
- Date of letter that accompanied the change submittal (if no letter, date the mapping partner received the change submittal)
- Date the change became effective (usually on the last page of the ordinance)

The information above is used to create the response letter to the community. The FIRM panels are reviewed as discussed in 2.6.1, and the correct response letter is mailed as appropriate.

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2.6.3 Other Coordination and Documentation Activities

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In addition to responding to the community and making the community aware of the flood hazards information regarding the area, the change information will be used by FEMA when maps are updated. If the change is addressed by an ongoing study, by a PMR, or by a LOMR, then the change would be incorporated in the FIRM for the community. Usually a map action is not necessary and a letter acknowledging receipt of the information is sent to the community.

FEMA uses the MNUSS database to assist when prioritizing funding for map updates, and a change is considered a Map Maintenance Need. A Data Collection Worksheet is filled out for the change and this information is entered into MNUSS. The Data Collection Worksheet and a copy of the response letter are attached to the corporate limit change submittal and filed as a Future File in the MNUSS Files. The following information is entered into a spreadsheet and used to research available data when a map update is being done for a community:

- CID, name, County, State of community assuming jurisdiction
- CID, name, County, State of community losing jurisdiction
- Number of changes
- Ordinance received (Y/N or Date)

- Map received (Y/N or Date)
- Date most recent change became effective
- Date received the change submittal
- Date responded to the change submittal
- Method of response (which type of letter)

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2.6.4 Deliverable Products

The processing Mapping Partner shall prepare and distribute the Standard Response Letter, the Ordinance Upgrade Response Letter, or the Restudy Response Letter as indicated in Section 2.6.1.

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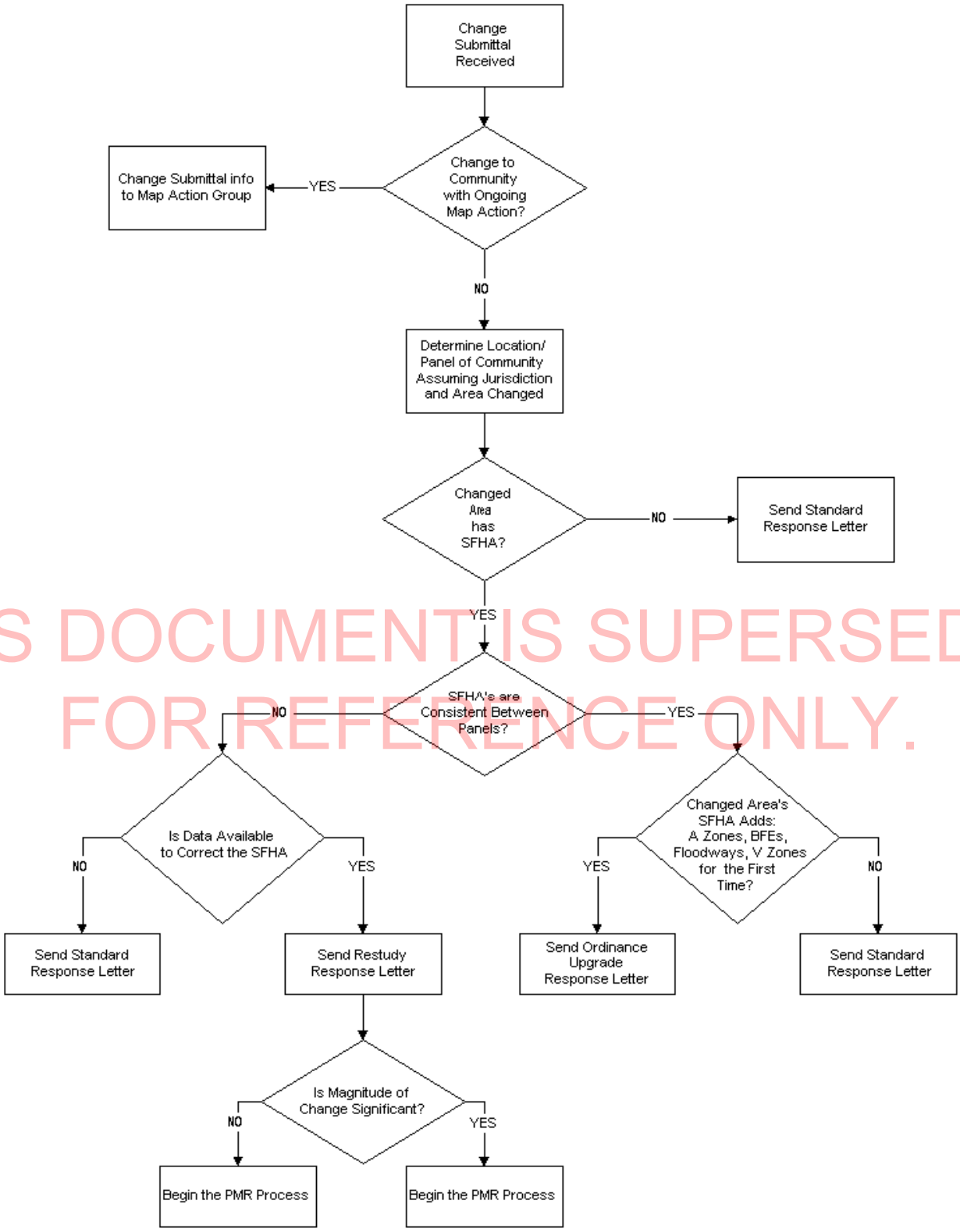

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Figure 2-3. Map Revision Decision-Making Flowchart

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2.7 Program Implementation

2.7.1 Documentation Control Procedures

The assigned Mapping Partner shall perform the required procedures for preparing and distributing standard and nonstandard letters for conditional and final map revisions and map amendments as presented in Sections 2 and 3 and Appendices B and C of the FEMA *Document Control Procedures Manual* (FEMA, July 2000). This includes mailing letters, with their appropriate enclosures, as specified in the U.S. Postal Service Domestic Mail Manual (U.S. Postal Service, 2001).

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2.7.2 Standard Processing

In accordance with Section 65.9 of the NFIP regulations, when a revision to an NFIP map is requested, the CEO of the community must receive notification (in writing) of the status of the request. This notification must be provided within 90 days of the receipt of the request and will state one or more of the following:

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- The effective map(s) shall not be modified.
- The BFEs on the effective FIRM shall be modified, and new BFEs shall be established.
- The changes requested are approved, and the map(s) are revised by a LOMR.
- The changes requested are approved. Revised FIRM (and FBFM) panels will be printed and distributed.
- The changes requested are not significant enough to warrant a reissuance or revision of the FIS report, FIRM, and/or FBFM and will be deferred until such time as a significant change occurs.
- The evaluation of the scientific or technical data submitted will require an additional 90 days to complete.
- The data submitted to support the revision request are not adequate. Additional data must be provided.

This notification is generally interpreted as a written response by the Administrator of the Federal Insurance and Mitigation Administration or his/her designee; therefore, the Mapping Partner shall complete all reviews or determine that such completion is not possible to allow ample time for correspondence preparation, review, signature, and mailing within the timeframe. However, to ensure a timely review of and response to any revision requests (including LOMR-Fs and LOMAs), the assigned Mapping Partner shall prepare a letter that either outlines the

additional data needed to resolve the revision request or provides an explanation of what revisions will be undertaken within 30 days of receipt of a revision request.

Furthermore, because lengthy delays in resolving requests for map revisions may occur, the assigned Mapping Partner shall develop and institute procedures to ensure that periods of 90 days or more do not elapse without FEMA corresponding with the requester. The purpose of the correspondence is to advise the revision requester of the status of his or her revision request.

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2.8 Fee-Collection System Responsibilities

2.8.1 Background

In January 1986, FEMA instituted a fee-collection system to recover costs incurred in reviewing proposed projects and issuing CLOMAs, CLOMR-Fs, and CLOMRs. In October 1992, FEMA expanded the system to provide for the recovery of costs incurred in reviewing completed projects and issuing LOMR-Fs, LOMRs, and PMRs. Effective October 1, 1996, FEMA established a flat fee schedule for processing most requests for conditional and final map amendments and revisions. FEMA revised the current fee schedule on June 1, 2000.

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2.8.2 Coordination Responsibilities

Under the fee schedule, with one exception, requesters are required to submit payment to FEMA in advance of a review. The exception is requests for changes involving structural measures on alluvial fans. For most requests, the Mapping Partner will only be required to acknowledge receipt of the payment and coordinate with the Fee-Collection System Administrator (FCSA) to ensure all payments are deposited into the National Flood Insurance Fund. For requests involving structural measures on alluvial fans, requesters must submit an initial fee, and the Mapping Partner must document all billable hours (to nearest half hour) spent on these requests. The Mapping Partner must then notify FEMA and the requester if the initial fee will be exceeded and provide a revised estimate of the total review and processing costs (calculated as the total number of hours multiplied by an hourly rate).

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Additional information on the required coordination and documentation is provided in Section 2 of the FEMA *Document Control Procedures Manual* (FEMA, July 2000).

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2.8.3 Fee Exemptions

In accordance with Section 72.5 of the NFIP regulations, no review and processing fee shall be collected by the Mapping Partner for the following exempted types of requests:

- Map change requests based on mapping or study analysis errors;
- Map change requests based on the effects of natural changes within SFHAs;
- LOMA requests;
- Map change requests based on federally sponsored flood-control projects where 50 percent or more of the project's costs are federally funded; and

- Map change requests based on detailed hydrologic and hydraulic studies conducted by Federal, State, or local agencies to replace approximate studies conducted by FEMA and shown on the effective FIRM.

- Map changes based on flood hazard information meant to improve upon that shown on the flood map or within the flood study. NOTE: Improvements to flood maps or studies that partially or wholly incorporate man-made modifications within the SFHA will not be exempted from fees.

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2.9 Special Conversion Processing Procedures

Under standard conversion procedures, a newly identified community or a community that previously participated in the Emergency Phase of the NFIP enters the Regular Phase of the NFIP based on the results of the detailed analyses performed as part of a study. However, through the Special Conversion process, FEMA may also convert a community to Regular Phase of the NFIP without performing a detailed engineering study. For some communities, the Special Conversion process may be initiated at the recommendation of a Mapping Partner that has undertaken a study/restudy under contract to FEMA. In such cases, that Mapping Partner may submit some form of engineering analysis with a letter report recommending a Special Conversion.

Under this process, a community is converted, at the recommendation of the RO, through one of the following procedures:

- Non-floodprone conversion;
- Minimal conversion by letter; or
- Minimal conversion by map.

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These procedures are described in more detail in Subsections 2.9.1 and 2.9.2.

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The FEMA RO staff initiates the Special Conversion process by submitting a Special Conversion Recommendation Report (SCRR) and/or letter report discussed above and appropriate supporting data to the FEMA PO or his/her designee. The FEMA PO or his/her designee then forwards the SCRR and appropriate supporting data to the Mapping Partner assigned by FEMA to review and process the Special Conversion. For all Special Conversion procedures, the assigned Mapping Partner shall perform the coordination and documentation activities required to convert the community to the Regular Phase of the NFIP, in accordance with the detailed procedures documented in Section 6 of the FEMA *Document Control Procedures Manual* (FEMA, 2000).

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2.9.1 Non-Floodprone Conversions

Non-floodprone communities are those communities that are determined not to be subject to inundation by the 1-percent-annual-chance (100-year) flood. The administrative 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 exist that preclude floodplain development in the community. If the floodprone areas in a community do not fit at least one of these guidelines, the community is not, under any circumstances, to be designated as non-floodprone. Non-floodprone communities are converted to the Regular Phase of the NFIP by letter only. No FIRM is issued, and any existing FHBM is rescinded. The entire community is designated as Zone X (unshaded).

Upon receipt of the SCRR and/or letter report from FEMA the assigned Mapping Partner shall ensure that at least one of the criteria for non-floodprone conversions are met. If these criteria are not met, the Mapping Partner shall inform the FEMA PO or his/her designee, who will request that the RO submit additional justification for its recommendation.

Once a community has been approved for a non-floodprone conversion, the assigned Mapping Partner shall prepare the necessary correspondence to effect the conversion. Depending on the community's status in the NFIP, the Mapping Partner shall prepare one of three non-floodprone conversion letters. The Mapping Partner shall distribute copies of the letters and prepare a CMA list for each community. Distribution shall occur 2 weeks prior to the effective date determined by the assigned Mapping Partner and noted on the CMA list.

The assigned Mapping Partner shall prepare the required correspondence for non-floodprone conversions to notify the community CEO and floodplain administrator, State NFIP Coordinator, affected Federal agencies, and the RO of the conversion. The types of correspondence to be prepared by the assigned Mapping Partner are discussed in detail in Section 4 of *Document Control Procedures Manual* (FEMA, July 2000).

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2.9.2 Minimal Conversions

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Minimally floodprone communities are those communities subject to inundation by the 1-percent-annual-chance (100-year) flood, but for which existing conditions indicate that the area is unlikely to be developed in the foreseeable future. The criteria used by RO staff to evaluate a community's development potential are as follows:

- 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.

The FEMA RO may use other indicators 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.

Minimal conversions can be accomplished by map or by letter, depending on whether revisions to the existing FHBM are required. For communities for which no FHBM has been published (i.e., newly identified communities), the assigned Mapping Partner shall follow the procedures

detailed in Subsection 3.21.2 of these Guidelines and Section 6 of the FEMA *Document Control Procedures Manual* (FEMA, July 2000).

The length of the entire minimal conversion process and the assigned Mapping Partner processing times for minimal conversions are discussed in Subsections2.9.2.1 and 2.9.2.2. The length of the entire minimal conversion process depends on the conversion method used (map or letter) and on whether the community to be converted is compliant with the NFIP requirements concerning community floodplain management ordinances set forth in Sections 60.2 through 60.6 of the NFIP regulations. In general, the conversion process for compliant communities is shorter, because noncompliant communities must be allowed 6 months to enact the required ordinances before the conversion can become effective.

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2.9.2.1 Minimal Conversions by Map

If the SFHA shown on the existing FHBM for a community must be revised, the community is converted to the Regular Phase of the NFIP with a FIRM that is an updated version of the FHBM. The following categories of FIRMs may be printed, depending on the flooding situation in the community:

- The FIRM shows all SFHAs with a Zone A designation.
- The FIRM Index 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).
- The FIRM (one or more panels printed) shows Zones A and C (or Zone X (unshaded)) for the community's most populated areas and notes on the Map Index that all unprinted panels are Zone D, under the remote and uninhabited criteria.

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When a FIRM is to be prepared, the assigned Mapping Partner shall obtain the most current data, including USGS topographic maps; floodprone area maps; original FHBM artwork; FIS reports and FIRMs for contiguous communities; Floodplain Information Reports; watershed work plans; other reports available through USGS, NRCS, or USACE; and documentation for the effective FHBM. The assigned Mapping Partner also shall incorporate changes made previously by LOMA, LOMR-F, or LOMR, as appropriate.

With the SCRR and/or letter report, the RO will submit an annotated FHBM or community map with updated corporate limits, road names, and flooding information. The assigned Mapping Partner shall compare this information to NFIP maps for contiguous communities to ensure the flood hazard information matches. If during the review of contiguous communities, the assigned Mapping Partner finds that floodplain boundaries do not match, or if other sources are found to provide detailed flooding information, the assigned Mapping Partner shall consult with the PO or his/her designee to determine if an existing data study (XDS) is appropriate.

Unless the SCRR and/or letter report indicate an appropriate engineering review has already been completed, the assigned Mapping Partner shall review the areas of flooding designated in the available information. Any apparent errors or discrepancies shall be investigated and, if needed, corrected. Although the assigned Mapping Partner is not required to check the flood discharges, the hydrologic evaluation performed by the Mapping Partner shall include, but not be limited to, an application of the criteria for non-floodprone communities.

All SFHAs shall be designated as Zone A. All areas outside SFHAs shall normally be identified as Zone X (unshaded), unless the RO has requested that some areas in the community (primarily remote and uninhabited areas in the community) be identified as Zone D. The assigned Mapping Partner shall obtain approval from the PO or his/her designee to depict Zone D areas on FIRMs.

If the technical review performed by assigned Mapping Partner indicates that a minimal conversion for a particular community may be inappropriate, or that significant effort would be involved for such a conversion, the assigned Mapping Partner shall consult with the PO or his/her designee on the action to be taken.

Because maps are to be converted to depict the most up-to-date FEMA procedures and flood hazard information, the assigned Mapping Partner shall use the most recent graphic guidelines, presented in Appendix K of these Guidelines. Extensive changes that may require conversion from 11 x 17 format to Z-fold format must be approved by the PO or his/her designee.

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At the completion of the technical review, the assigned Mapping Partner shall prepare the FHBM for the cartographic or digital mapping phase of the minimal conversion process. At this time, the assigned Mapping Partner shall assign an effective date for the FIRM and prepare a schedule in order to track the conversion through cartographic corrections, correspondence preparation and distribution, and GPO processing. The entire minimal conversion process usually requires 7 months from the receipt of the SCRR and/or letter report and all necessary data by the assigned Mapping Partner to the new FIRM effective date.

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The assigned Mapping Partner shall prepare the required correspondence for minimal conversions by map to notify the community CEO and floodplain administrator, State NFIP Coordinator, affected Federal agencies, and the RO of the conversion. The types of correspondence to be prepared by the assigned Mapping Partner and the responsibilities for monitoring community review of the FIRM are discussed in detail in Section 4 of the FEMA *Document Control Procedures Manual* (FEMA, July 2000).

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2.9.2.2 Minimal Conversions by Letter

If no changes are required to the SFHA shown on the existing FHBM, the community may be converted to the Regular Phase of the NFIP with a letter only. In such cases, the assigned Mapping Partner shall verify that this procedure is correct by checking the accuracy of the corporate limits, floodplain boundary delineations, and other physical and cultural features. If, during the review, the assigned Mapping Partner locates sufficient data to prepare an XDS for the community, the Mapping Partner shall consult with the PO or his/her designee. If the

assigned Mapping Partner determines the FHBM is inaccurate, the Mapping Partner shall contact the RO to determine if a minimal conversion by map is warranted. For those FHBMs that meet the criteria for conversion by letter, the assigned Mapping Partner shall prepare and distribute the required correspondence. The specific procedures to be followed are discussed in detail in Section 4 of *Document Control Procedures Manual* (FEMA, July 2000).

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2.10 References

Federal Emergency Management Agency, *Document Control Procedures Manual*, July 2000.

Federal Emergency Management Agency, FIA-12*, Appeals, Revisions, and Amendments to National Flood Insurance Program Maps: A Guide for Community Officials*, 1993.

Federal Emergency Management Agency, "Modernizing FEMA's Flood Hazard Mapping Program: Recommendations for Using Future-Conditions Hydrology for the National Flood Insurance Program," November 2001.

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U.S. Department of the Interior, Coastal Barriers Study Group, *Report to Congress: Coastal Barrier Resources System, Recommendations for Additions to or Deletions from the Coastal Barrier Resources System*, 1988.

Interagency Advisory Committee on Water Data, Office of Water Data Coordination, Hydrology Subcommittee, Bulletin 17B*, Guidelines for Determining Flood Flow Frequency*, 1982.

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