U.S. Department of Homeland Security
500 C Street, SW
Washington, DC 20472

FEMA

APR 2 4 2009

MEMORANDUM FOR: Mitigation Division Directors
Regions I - X

FROM: Doug Bellomo, Director
Risk Analysis Division

SUBJECT: Procedure Memorandum No. 52 –
Guidance for Mapping Processes associated with Levee Systems

EFFECTIVE DATES: **April 24, 2009**

Guidelines for Mapping Landward of Levee Systems: **Effective immediately for all newly initiated studies and expiring PALs, optional for all other ongoing studies**

Guidelines for the Notification Process for De-accredited Levees: **Effective immediately**

Background: One primary role of FEMA through the National Flood Insurance Program (NFIP) is to identify and map flood hazards from flooding sources in various locations, including areas landward of (i.e., behind) levees. In accordance with NFIP regulations, FEMA requires levee owners or other parties seeking the recognition of a levee to provide data and documentation demonstrating that the levee system meets the requirements of the NFIP regulations cited in the Code of Federal Regulations (CFR) at Title 44, Chapter 1, Section 65.10 (44 CFR Section 65.10) if the levee system is to be accredited on a Digital Flood Insurance Rate Map (DFIRM). FEMA will then reflect an accredited levee system on the DFIRM and will determine how the flood hazard information will be shown. If FEMA does not receive the 44 CFR Section 65.10-compliant data and documentation for a levee, it will not be accredited, and the area landward of the levee will be identified as a Special Flood Hazard Area.

The FEMA mission regarding levees, through the NFIP, is to identify the 1-percent-annual-chance (base) flood hazard associated with the levee system for insurance and floodplain management purposes. It is important to note that the FEMA NFIP standards and flood hazard mapping do not reflect the performance, reliability or overall safety of a levee system.

All policy and standards in this document have been superseded by the FEMA Policy for Flood Risk Analysis and Mapping.
However, the document contains useful guidance to support implementation of the new standards.

Since the establishment of 44 CFR Section 65.10 in 1986, FEMA has adjusted and clarified its review and mapping procedures for levees. Recently, FEMA issued two Procedure Memoranda that provide guidance for mapping areas behind levees – Procedure Memorandum No. 34 (PM 34), *Interim Guidance for Studies Including Levees*, in August 2005, and Revised Procedure Memorandum No. 43 (PM 43), *Guidelines for Identifying Provisionally Accredited Levees*, on March 16, 2007. These Procedure Memoranda supplement and clarify the information in Appendix H of FEMA's *Guidelines and Specifications for Flood Hazard Mapping Partners* (*Guidelines and Specifications*) on mapping the base flood in areas with levees.

Issue: Before 44 CFR Section 65.10 was implemented in 1986, FEMA did not have regulatory requirements for the accreditation of a levee on the DFIRM. Levee accreditation was left largely to judgment and as a result, there are an undetermined number of levees that may not meet the criteria in 44 CFR Section 65.10 that are currently shown as accredited.

FEMA expects that ongoing mapping efforts and the publication of PM 34 and PM 43 will lead to the investigation of most levees that are currently shown as accredited on a DFIRM. In implementing PM 34 and PM 43, and as provisionally accredited levee (PAL) designations expire, a significant number of levees will be accredited and de-accredited. De-accreditation of a levee in accordance with Appendix H of *Guidelines and Specifications* can be a long and expensive process to undertake within the limited timeframes and scope of the flood map production cycle. In addition, the de-accreditation process requires critical outreach and communication to the stakeholders of those areas landward of the levee.

FEMA has identified the need to develop comprehensive practices for the engineering analyses and mapping of flood hazards on the landward side of levees. These practices must allow for flexibility based on the relative risk to the landward side of the levee while maintaining national consistency in the approach. The intention of these practices is to minimize delays and costs that would seriously impact flood mapping projects and the ability to deliver improved flood hazard mapping to stakeholders.

In addition, FEMA realizes that when a levee is de-accredited, there are specific stakeholders with whom we should coordinate, and that the messaging, materials, and process must be relatively consistent among all Regions and mapping partners.

Action Taken: Two sets of guidelines have been produced to address these needs. First, the Guidelines for Mapping Landward of Levee Systems provide mapping alternatives associated with accredited, non-accredited, and de-accredited levees. These guidelines clarify and enhance those described in Appendix H of *Guidelines and Specifications*. These guidelines provide options for the mapping of areas landward of a levee system based on the urbanization associated with that area.

Second, the Guidelines for the Notification Process for De-accredited Levees identify a nationally consistent notification process to stakeholders.

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However, the document contains useful guidance to support implementation of the new standards.

These attached guidance documents shall be implemented by all Regions and Mapping Partners in accordance with their Effective Dates.

Attachments

Guidelines for Mapping Landward of Levee Systems
Guidelines for the Notification Process for De-accredited Levees

cc: See Distribution List

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Guidelines for Mapping Landward of Levee Systems

1. Introduction

In Procedure Memorandum No. 34 (PM 34), FEMA reiterated that the community or other parties seeking recognition of a levee system are responsible for providing the data outlined in Title 44, Chapter 1, Code of Federal Regulations (CFR), Section 65.10 (hereafter referred to as 44 CFR Section 65.10) at the time of a flood risk study or restudy. These data must be provided, even if the stream of interest is not being studied. In Procedure Memorandum No. 43 (PM 43), FEMA provided guidelines for various scenarios that will allow the mapping for selected studies/mapping projects for communities with levees to move forward before the full documentation required in 44 CFR Section 65.10 is available. With this process, the FEMA Regional Offices, FEMA contractors, and mapping partners can issue preliminary and effective Digital Flood Insurance Rate Maps (DFIRMs) while providing the communities and levee owners a specified timeframe for the submittal of the documentation necessary to show compliance with 44 CFR Section 65.10.

In implementing PM 34 and PM 43, and as Provisionally Accredited Levee designations expire, some levees will be de-accredited. The actual mapping procedures for identifying flood hazards landward of levees defined in Appendix H of *Guidelines and Specifications for Flood Hazard Mapping Partners*, are being enhanced to add clarity and ensure national consistency while maintaining some flexibility. These *Guidelines for Mapping Landward of Levee Systems* will allow the FEMA Regional Offices and mapping partners to have some flexibility for the mapping of areas landward of a de-accredited levee, while national consistency is achieved.

2. Engineering and Mapping Guidance

2.1. "With Levee" and "Without Levee" Analyses

Current procedures described in Section H.5 of the *Guidelines and Specifications* outline the current engineering and mapping methods for studies with levees that do not comply with 44 CFR Section 65.10. This section introduces "with levee" and "without levee" analyses and includes the following hydraulic modeling and mapping protocol:

- Develop profiles for the 10-percent, 2-percent, and base (1-percent-annual chance) "with levee" floods;
- Recompute the profile for the base flood "without levee" analysis, as if the levee did not exist, and develop the profile for the 0.2-percent-annual-chance "without levee" flood;

It should be noted that these profiles represent the minimum profiles to be computed for "with levee" and "without levee" analyses. Additional profiles may be added as part of scoping activities based on discussions with the community affected, funds available, and approval of the Region.

If the top-of-levee elevation is higher than the "with levee" Base (1-percent-annual-chance) Flood Elevation (BFE), then the "with levee" BFEs calculated in the main channel are mapped riverward of the levee and the "without levee" BFEs are mapped

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landward of the levee; if the top-of-levee is lower than the "with levee" BFE, then either the "with levee" BFE or the top-of-levee elevation is mapped riverward of the levee and the "without levee" BFEs are mapped landward of the levee.

To further clarify the hydraulic modeling of the "without levee" analysis as referenced in the *Guidelines and Specifications,* the levee ground geometry should be reflected in each cross section along the length of the levee. However, the area landward of the levee should be permitted to flood and the levee itself should not be assumed to impede conveyance. Manning's 'n' values both landward and riverward of the levee shall reflect the actual ground conditions. The de-accredited levee shall not be modeled using a split-flow analysis.

2.2. Floodway Mapping Methods

The floodway shall be calculated using the "without levee" analysis. The floodway analysis will be performed using standard equal conveyance reduction methods. If a floodway boundary is computed to be between the landward toe and riverward toe of a levee, then the floodway boundary should be designated on the landward toe.

If a floodway boundary falls entirely riverward or landward of the levee, the floodway boundary should be delineated at its computed location. However, in the case of a floodway boundary falling riverward of the levee, the FEMA Regional Office may elect to delineate the floodway on the landward toe of the levee if the community or State has jurisdiction over the floodway, indicates this as a preference, and will enforce the wider floodway.

2.3. Multiple Levee Scenarios

When levee systems exist on both sides of a river, or there are multiple levee systems protecting the same area, all procedures for mapping landward of levee systems, as defined below, must be considered. The appropriate procedure shall be chosen and each levee system shall be individually analyzed. The higher BFEs shall be used for mapping the flood hazards on the DFIRM.

If an area is impacted by both an accredited levee and a de-accredited levee, the area shall be mapped in accordance with the appropriate procedure for the de-accredited levee.

2.4. Breaching Scenarios

Breaching scenarios are occasionally performed by some Federal agencies, States, communities, and/or other entities to analyze the effectiveness or economic risk of the levee systems for which they are responsible. FEMA will not fund analyses using breaching scenarios. Additionally, breaching scenario analyses shall not be shown on a DFIRM to reflect the base flood.

3. Procedures for Mapping Levee Systems

To ensure defensible results, the engineering procedures shall reflect the existing conditions of the levee and the impacted area to the maximum extent practicable. The mapping procedures will use the "with levee" analysis to map the area riverward of the levee. In addition, the areas upstream and downstream of the levee will be modeled

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using the "with levee" analysis. The "without levee" analysis will be used to map the areas landward of the levee.

Procedure Memorandum No. 45 (PM 45) served to provide greater clarity and consistency of risk messages related to areas impacted by accredited levees and provisionally accredited levee (PAL) systems by developing revised map notes and Notes to Users (map frame notes). The map and map frame notes defined in PM 45 shall be applied when mapping accredited levee systems in accordance with the following procedures.

3.1. Detailed Procedure for Engineering and Mapping (*Detailed Procedure*)

In order to determine the extent of the "without levee" analysis, utilize the effective or a newly developed detailed hydraulic model. Cross sections may need to be added to supplement effective models to best reflect the current condition of the levee and the landward areas. For de-accredited levees, the "without levee" BFEs will be mapped on the best available topography landward of the levee as a Zone AE. Where either:

a) Evidence is sufficient to show the area landward of the levee would have minimal conveyance regardless of the existence of the levee, or

b) A sensitivity analysis is performed which documents that the "without-levee" condition would be less than 0.5 feet different than the "with-levee" condition along the entire profile,

The "with levee" BFEs take the place of the "without levee" BFEs. The decision to use "with levee" BFEs landward of the levee will be made by the FEMA Regional Office with either a) or b) above documented in the Technical Support Data Notebook.

For accredited levees, the "without levee" base flood water-surface elevations will be mapped on the best available topography landward of the levee as a shaded Zone X with the appropriate protected area note, per PM 45. It is important to note that this area of shaded Zone X does not depict the 0.2-percent annual chance floodplain; rather, it represents the area landward of the levee system being protected from the base flood. Any areas of residual risk and interior drainage flooding that fall within this area shall be mapped as a Special Flood Hazard Area (SFHA), the area subject to the base flood.

For de-accredited and accredited levees where the difference between the "with" and "without levee" BFEs is greater that 0.5 feet, the "with levee" BFEs will be mapped on the riverward side of the levee. A gutter line will be placed at the centerline of the levee, except in cases where the floodway is designated at the landside toe of the levee. In these instances, the gutter will be placed just landward of the floodway boundary to separate the two zones and create the break in the BFE. BFEs are mapped and published in the Flood Insurance Study (FIS).

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3.2. Limited Detailed Procedure for Engineering and Mapping (*Limited Detailed Procedure*)

An analysis similar to a detailed analysis will be performed; however, this procedure is scalable to allow flexibility in the amount of data gathering necessary.

For the hydrology, utilize effective flows from the FIS, provided they are still valid. If hydrology was not previously performed, is no longer valid, or discharges are not available in the FIS or from other reliable sources, a new hydrologic analysis shall be used. Appendix C of *Guidelines and Specifications for Flood Hazard Mapping Partners* provides further guidance on the acceptable methods for hydrologic analysis.

The mapping partner shall develop a hydraulic model using cross-sectional data from the best available topography. If as-built information is available for hydraulic structures and elevations of road embankments that impact the profiles, those data shall be included. If as-built information is not available, estimates of openings for structures that would have a significant impact on the water-surface elevation may also be included. The conveyance areas landward of the levee shall be treated as an effective flow area and Manning's 'n' values shall reflect the actual ground conditions without consideration of the impacts that the levee embankment, itself, may have on conveyance.

For de-accredited levees, the FEMA Regional Office and mapping partner will meet with the community and State to determine what Zone will be mapped for the area landward of the levee. The objective of this meeting is to discuss and decide if the "without levee" base flood water-surface elevations produced under a Limited Detailed engineering analysis will be published on the maps as Zone A or Zone AE. The FEMA Region, the State, and the community or communities must agree on how the water-surface elevations will be used. If an agreement cannot be made between all parties, the FEMA Regional Office will consult with FEMA Headquarters and make the decision based on the input from the meeting and their technical knowledge of the engineering analysis.

If the decision is to map a Zone AE, the mapping will be the same as for the *Detailed Procedure*.

If the decision is to map a Zone A, the "without levee" base flood water-surface elevations will be mapped on the best available topography landward of the levee as an approximate Zone A. The zone shown on the map riverward of the levee would be equivalent to the zone riverward of the levee shown on the previously effective FIRM.

For accredited levees, the mapping landward of the levee will be the same as for the *Detailed Procedure*.

3.3. Approximate Procedure for Engineering and Mapping (*Approximate Procedure*)

Use a simplified hydraulic analysis, such as normal depth (slope-conveyance) computations, at several critical locations along the floodplain to define the floodplain depths landward of the levee.

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For de-accredited levees, the "without levee" base flood water-surface elevations will be mapped on the best available topography landward of the levee as an approximate Zone A. The zone shown on the map riverward of the levee would be equivalent to the zone riverward of the levee shown on the previously effective FIRM.

For accredited levees, the mapping landward of the levee will be the same as for accredited levees under the *Detailed Procedure.*

4. The De-Accreditation Process

Before 44 CFR Section 65.10 was implemented in 1986, FEMA did not have regulatory requirements for the accreditation of levees or standardized procedures for mapping landward of levees. FEMA will only recognize and accredit on its flood maps those levee systems that have met and continue to meet the criteria of 44 CFR Section 65.10. However, if the submitted data and documentation does not comply with these criteria, the levee or levee system will be de-accredited.

To provide clarity and consistency, the following procedures shall be applied in future projects to determine the method of analysis.

If a new detailed hydraulic analysis is incorporated into the map as part of the current project, the *Detailed Procedure*, as defined in Section 3.1, shall be followed. Also, if there is an effective model that can be obtained digitally and can be run in an acceptable model, the *Detailed Procedure* shall be followed.

If the *Detailed Procedure* can not be applied as described above, then either the *Limited-Detail Procedure* or *Approximate Procedure, as defined in Section 3.2 and 3.3, respectively,* will be used. In order to determine which of these two procedures are appropriate, the mapping partner shall determine the "impacted area" landward of the levee. The impacted area will be used to gain a sense of the population density/urbanization of the area landward of the levee.

The impacted area will be determined by either:

a) Utilizing the "Protected Area" layer in the Mid-Term Levee Inventory, if it is complete; or

b) Delineating the area that would be flooded if the riverward BFE were applied landward of the levee. This impacted area will then be overlaid onto a layer of population density by census block group.

The average population density within the impacted area will then determine the procedure to be used. A population density at or less than 2,500 people per square mile is considered rural by the U.S. Census Bureau. The *Approximate Procedure* shall be followed for these rural areas. The Census Bureau defines an urbanized area as a central place and the densely settled territory surrounding it, having a total population of 50,000 or more with a population density of at least 1,000 people per square mile. For urbanized areas and areas with a population density greater than 5,000 people per square mile, the mapping partner shall use a *Limited Detail Procedure*. Where the criteria for an urbanized area is not met and the population densities are between 2,500 and 5,000 people per square mile, or the FEMA Regional Office determines that more detailed mapping standards may be appropriate due to critical structures located within the SFHA,

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the FEMA Regional Office will have the discretion to consult with FEMA Headquarters and determine if the *Approximate* or *Limited Detail Procedure* should be used, based on their knowledge of the area and coordination with the State and impacted communities.

To help Regions and mapping partners determine the appropriate Procedure for mapping de-accredited levees, a flowchart is provided in Figure A.

5. The Accreditation Process

FEMA will only recognize and accredit on its flood maps those levee systems that have met and continue to meet the criteria of 44 CFR Section 65.10. If the submitted data and documentation complies with these criteria, the levee or levee system will be accredited.

To provide clarity and consistency, the following process shall be applied to determine the appropriate procedure for analyzing and mapping the area landward of the accredited levee. These are similar to the de-accreditation procedures, with the only difference being the decision-making process for the *Detailed Procedure*.

The *Detailed Procedure* does not need to be used if the effective model exists, but was not otherwise utilized during the mapping on the effective FIRM. However, the *Detailed Procedure* shall be utilized if either of the following occurs:

- A new detailed analysis is incorporated into the map as part of the current project, or
- The effective model has been utilized for the current project to evaluate the levee or to re-delineate the SFHA.

If it is determined that a *Detailed Procedure* is not appropriate, then the decision to utilize either the *Limited Detail* or *Approximate Procedure* is the same as for the de-accreditation process.

To help Regions and mapping partners determine the appropriate procedure for mapping accredited levees, a flowchart is provided in Figure B.

If there is any question as to the appropriate procedure for a de-accredited or accredited levee, or if the scenario is complex and not otherwise covered by these guidelines, the final decision concerning the appropriate procedure for analysis and mapping of areas landward of levees will be made by the FEMA Regional Office, in coordination with FEMA Headquarters. The FEMA Regional Office should properly document the decision and supporting data for future determinations and assessments. This documentation shall be included in the Technical Support Data Notebook.

6. Completion of Mapping Project

For all study types, once the appropriate mapping has been completed, FEMA will proceed with the normal study processing procedures and produce a Preliminary (or revised Preliminary) DFIRM. From this point forward, the mapping processing will follow standard preliminary and post-preliminary production procedures. The only change to the post-preliminary procedures will be the notification processes outlined in *Guidelines for the Notification Process for De-Accredited Levees*.

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FIGURE A: Mapping Procedures for De-Accredited Levees

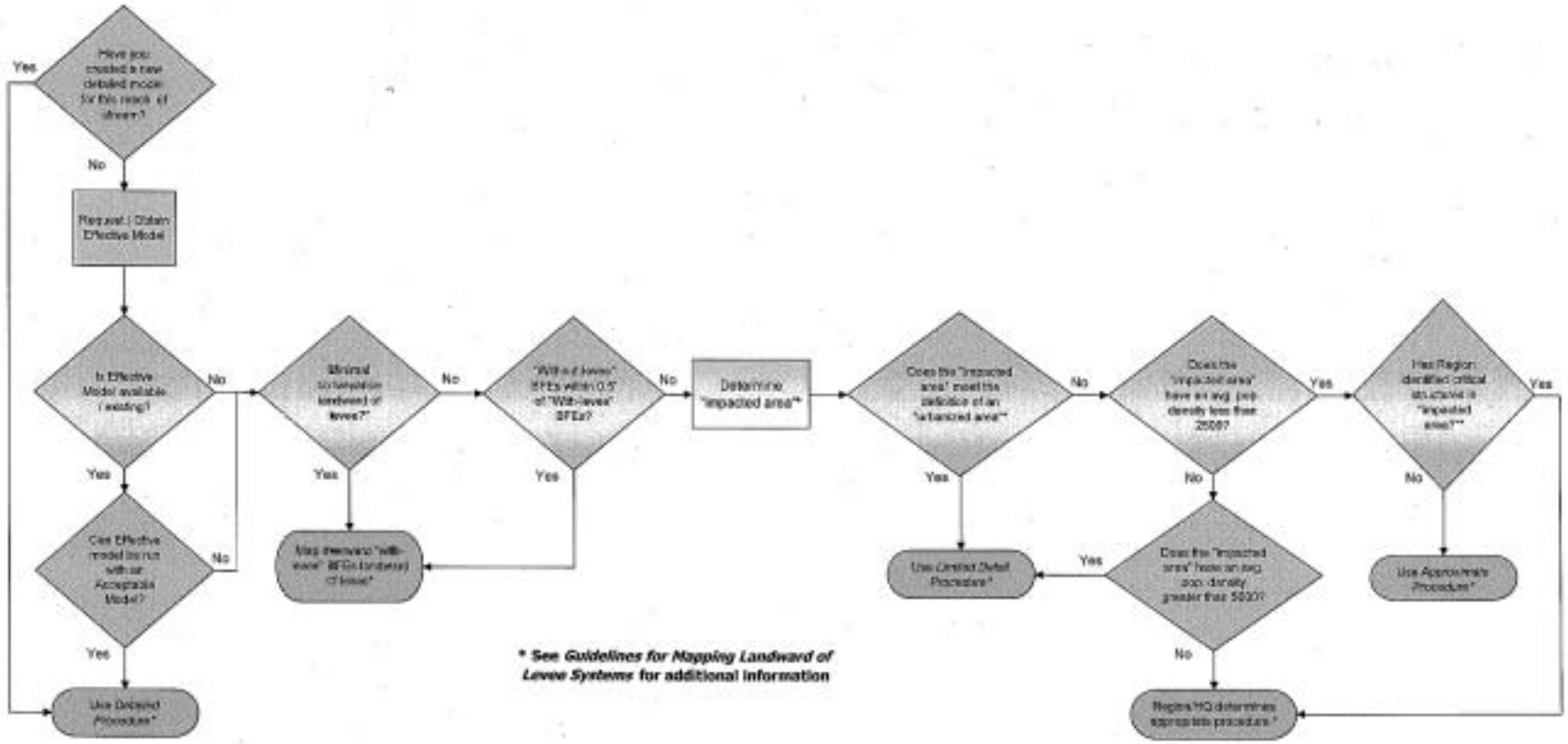

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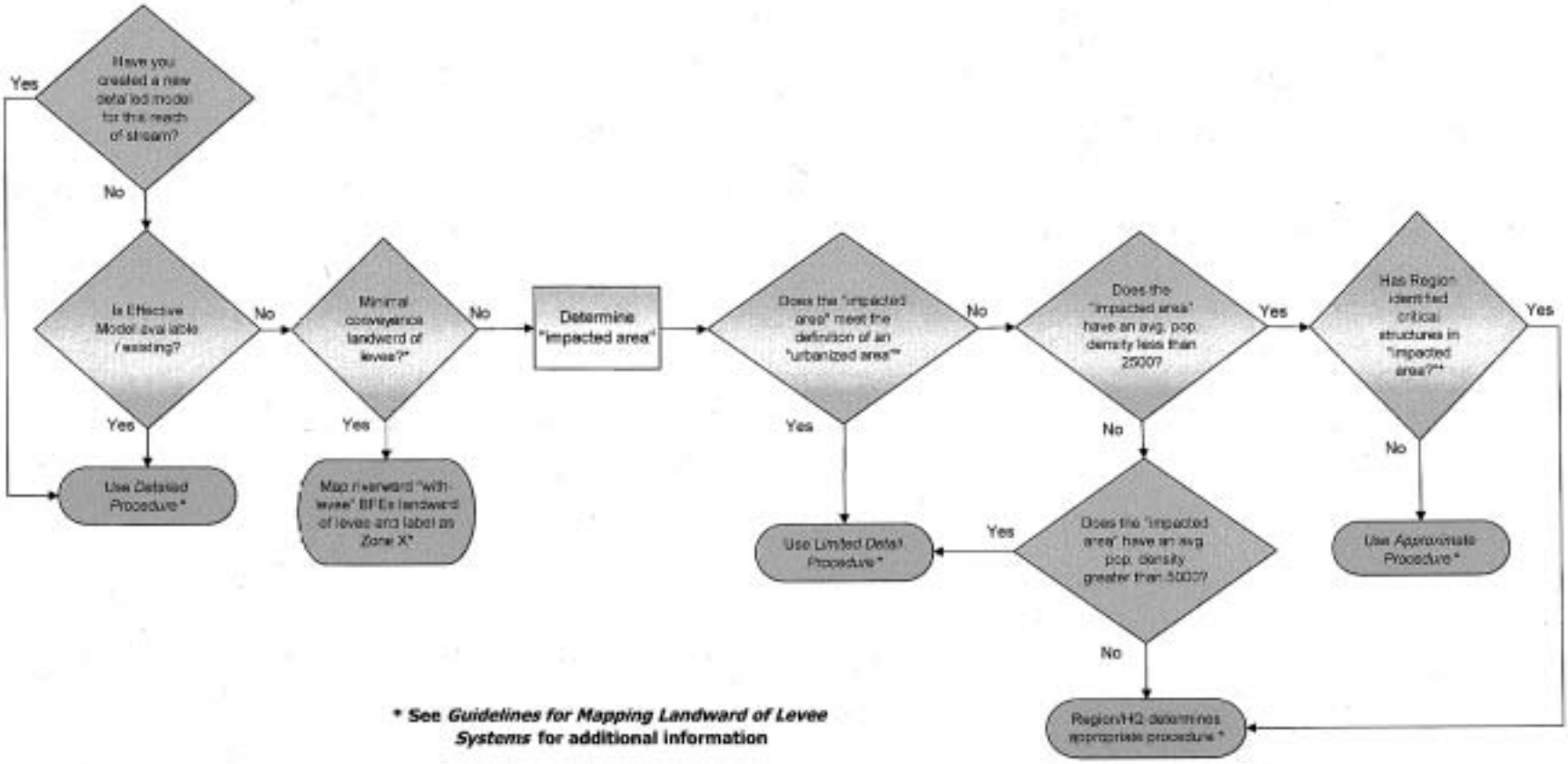
FIGURE B: Mapping Procedures for Accredited Levees



*** See *Guidelines for Mapping Landward of Levee Systems* for additional information**

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Guidelines for the Notification Process for De-Accredited Levees

Introduction

In Procedure Memorandum No. 34 (PM 34), FEMA reiterated that the community or other parties seeking recognition of a levee system are responsible for providing the data outlined in the National Flood Insurance Program regulations cited in the Code of Federal Regulations (CFR) at Title 44, Chapter 1, Section 65.10 (44 CFR Section 65.10) at the time of a flood risk study or restudy. These data must be provided, even if the stream of interest is not being studied. In Procedure Memorandum No. 43 (PM 43), FEMA provided guidelines for various scenarios that will allow the mapping for selected studies/mapping projects for communities with levees to move forward before the full documentation required in 44 CFR Section 65.10 is available. With this process, the FEMA Regional Offices, FEMA contractors, and mapping partners can issue preliminary and effective Digital Flood Insurance Rate Maps (DFIRMs) while providing the communities and levee owners a specified timeframe for the submittal of the documentation necessary to show compliance with 44 CFR Section 65.10. These levees are designated as Provisionally Accredited Levees (PAL) during this timeframe.

In implementing PM 34 and PM 43, and as PAL designations expire, levees will be either accredited or de-accredited. The de-accreditation process will require critical outreach and communication to the stakeholders of those areas landward of the levee. These guidelines provide clarification on a consistent notification process to stakeholders.

Procedures

Once a currently accredited levee system has been identified, the FEMA Regional Office will determine the owner of the levee, plus all communities that are impacted by the levee. If the levee owner is not discernable, coordinate first with the USACE District and then with the impacted communities to determine if they are aware of levee ownership. The Regional Office will work with the levee owner and impacted communities in accordance with the Guidelines and Specifications and associated Procedure Memorandum to determine a path ahead.

If the levee system does not meet the criteria within 44 CFR Section 65.10, the Regional Office will meet with the officials from the impacted communities/counties, levee owners, and State(s) to explain the de-accreditation mapping process and the associated flood insurance and floodplain management implications. This meeting can take place in-person or by a conference call. The Regional Office will at a minimum provide these parties with outreach materials explaining the risk of living landward of a levee, plus any other materials that may be appropriate. The Regional Office should encourage the communities to conduct outreach to their citizens using these materials.

Following this meeting, all affected levee owners and communities will be notified in writing that FEMA is initiating the de-accreditation process. This notification letter will include a description of the de-accreditation process as well as an explanation that the

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new DFIRM will show the appropriate areas landward of the levee as being within a Special Flood Hazard Area (SFHA). The SFHA is the area that is subject to flooding during the 1-percent-annual-chance (base) flood. A template letter is provided as reference. This letter shall be sent at minimum to the head of the entity that owns the levee and the Chief Executive Official of each affected community. The Regional Office shall also send a copy of this letter to each congressional district office, the Floodplain Administrator of each affected community, the State National Flood Insurance Program (NFIP) Coordinator and the U.S. Army Corps of Engineers (USACE) District point of contact for levees.

Following the issuance of a Preliminary DFIRM that reflects the de-accredited levee, FEMA and its mapping partner(s) shall meet with the same stakeholders as were invited to the initial notification meeting. A "Final Community Coordination Meeting (CCO)" will be conducted to inform the local community officials, the levee owner and public of the newly identified flood risk and the post-preliminary mapping process. Additional meetings with local officials and/or the public impacted by the levee may be warranted. If there are no insurable structures landward of the newly de-accredited levee, and the general public is not impacted by the increased flood hazard resulting from the de-accredited levee, the Region may choose to not hold a public meeting. The determinations regarding the number of public meetings necessary will be made by the Region, in coordination with community officials.

If there are revised Base Flood Elevations (BFEs), FEMA will initiate a 90-day appeal period, as required by 44 CFR Part 67. FEMA will notify the communities, levee owners, states and congressional delegations of the 90-day appeal period by letter, encouraging the communities to inform their citizens of the pending change in BFEs and flood hazard designation and the opportunity to appeal. In addition the standard newspaper notifications will take place.

If there are no revised BFEs in any of the communities within the mapping project and the flood hazard mapping has changed due to the de-accreditation of a levee, FEMA will initiate a 90-day comment period for the community. In this instance, FEMA will notify the communities and levee owners of the comment period by letter, and encourage the communities to inform their citizens of the pending change in flood hazard designation and the opportunity for comment. In addition, a newspaper notification will be posted for this levee 90-day comment period.

All other processing and notifications following the issuance of a Preliminary DFIRM will be conducted in accordance with 44 CFR and *Guidelines and Specifications for Flood Hazard Mapping Partners*.

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90-DAY COMMENT PERIOD NOTIFICATION LETTER FOR LEVEE DE-ACCREDITION WITH NO BFE CHANGE

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:
101/155

_____(CEO Name and Address)_____
_____
_____
_____
_____

Community: _____
Community No.: _____

Dear _____:

On (Date Preliminary Sent), the Federal Emergency Management Agency (FEMA) of the Department of Homeland Security provided your community with Preliminary copies of the [revised] Flood Insurance Study (FIS) report and Digital Flood Insurance Rate Map (DFIRM). Because the _____ Levee(s) is/are not in full compliance with the National Flood Insurance Program (NFIP) regulations cited at Title 44, Chapter 1, Section 65.10 of the Code of Federal Regulations (44 CFR 65.10), the delineation of the floodplain boundary of the 1-percent-annual- chance (base) flood for certain locations in the [Community Name] has been revised. Public notification of the proposed floodplain boundary modifications for (Name of Flooding Source), from (Beginning of Studied Reach) to (End of Studied Reach), will be given in the (Name of Newspaper) on or about (Publication Date and Publication Date). A copy of this notification is enclosed.

During a 90-day comment period, which follows the publication in the above-named newspaper, any person in the community may comment on the proposed floodplain boundary. These comments must be submitted to FEMA by the end of the 90 days. All comments will be considered before FEMA makes its final determination at the end of the comment period. Please send comments to William R. Blanton, Jr., Chief, Engineering Management Branch, Mitigation Directorate, Federal Emergency Management Agency, 500 C Street SW, Washington, DC 20472.

Comments of the proposed floodplain boundary modifications may be based on scientific or technical evidence contrary to that of the [proposed/revised] FIS report and DFIRM, or may also be a comment from the community that FEMA will consider. Inquiries regarding data other than the proposed floodplain boundary (e.g., incorrect street names, typographical errors, omissions) will be considered by FEMA, and any applicable changes will be made before the [proposed/revised] FIS report and DFIRM become(s) effective.

If your community intends on submitting comments based on scientific or technical data before the end of the 90-day comment period but missed the deadline, you may nevertheless submit data at any time through the Letter of Map Revision process. If warranted, FEMA will revise the DFIRM again after the effective date. This means that the [proposed/revised] DFIRM would be issued with the floodplain boundaries presently indicated, and flood insurance purchase requirements would be enforced accordingly, until such time as a revision could be made.

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The resolution process will take into account any scientific or technical data submitted by your community that tends to negate or contradict the information upon which the proposed floodplain boundary is based. The method for resolution will be determined by FEMA.

The reports and other information used in making the final determination will be made available for public inspection. Until the comments are resolved and the [proposed/revised] DFIRM becomes effective, flood insurance available within your community shall continue to be available [under the effective FIRM dated (Date of Effective FIRM)], and no person shall be denied the right to purchase the applicable level of insurance at chargeable rates.

The decision by your community to comment, or a letter of its decision not to, should be filed with this office no later than 90 days following the second publication of the proposed floodplain boundary modifications in the above-named newspaper. Your community may find it appropriate to call further attention to the proposed floodplain boundary modifications and to the comment procedure by using a press release or other public notice.

If warranted by substantive changes, during the comment period we will send you revised copies of the FIS report and DFIRM. At the end of the 90-day comment period and following the resolution of any comments, we will send you a letter of final determinations.

If you have any questions regarding the proposed floodplain boundary modifications, FIS report, or DFIRM for your community, please contact (FEMA Project Engineer) of our staff, either by telephone at (FEMA Project Engineer Telephone Number) or by facsimile at [phone number].

Sincerely,

William R. Blanton, Jr., Chief
Engineering Management Branch

List of Enclosures:

Newspaper Notice
"National Flood Insurance Program Regulations"
[Answers to Questions About The National Flood Insurance Program]

cc: Community Map Repository
(Community Floodplain Administrator)

bcc: State NFIP Coordinator
Regional Mitigation Division Director
Project Case File
FEDD File

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However, the document contains useful guidance to support implementation of the new standards.

DE-ACCREDITATION NOTIFICATION LETTER

Date

[Mr. / Ms.] [Name of Community CEO]
[Title]
[City/County]
[Address]
[City, State Zip]

Dear **[Mr. / Ms.] [Last Name of Community CEO]**:

This letter is in regard to the **(Name of Levee)** shown on the effective Flood Insurance Rate Map (FIRM) and in the effective Flood Insurance Study (FIS) report for **(County or Community Name)**. As you may know, the Federal Emergency Management Agency (FEMA) of the Department of Homeland Security **[is in the process of/will be]** producing a countywide FIS report and Digital Flood Insurance Rate Map (DFIRM) for **(County or Community Name)**.

As part of the FEMA effort to produce the DFIRM, it was determined that the flood hazard information presented on the effective FIRM and in the effective FIS report is based, in some areas, on flood protection provided by the **(Levee Name)**. Based on the information available and on the mapping standards of the National Flood Insurance Program (NFIP) at the time that the FIS was performed, FEMA accredited the levee.

INSERT ONE OF THE FOLLOWING PARAGRAPHS:

- In a letter dated **(Insert Date)**, FEMA provided you with a 90-day period to submit the entire Provisionally Accredited Levee (PAL) application package required for the levee to be provisionally accredited as providing base flood protection. However, we did not receive your submittal of all the required data associated with the PAL application before the 90-day period elapsed. Therefore, FEMA will be initiating a map revision to de-accredit the **(Levee Name)** and map the impacted areas on the landward side of the levee system**(s)**.
- In a letter dated **(Insert Date)**, FEMA provided you with a 24-month period to submit all necessary data and documentation to comply with the National Flood Insurance Program (NFIP) regulations cited in the Code of Federal Regulations (CFR) at Title 44, Chapter 1, Section 65.10 (44 CFR Section 65.10), which is required for the levee to be accredited. However, we did not receive the required data and documentation **[or the data and documentation that you submitted was deemed inadequate]** for compliance with 44 CFR 65.10 before the 24-month period elapsed. Therefore, FEMA will be initiating a map revision to remove the provisional levee accreditation, de-accredit the **(Levee Name)**, and map the impacted areas on the landward side of the levee system**(s)**.
- In a letter dated **(Insert Date)**, **(FEMA/USACE)** provided you with a 1-year correction period to remedy all levee maintenance deficiencies. However, you informed

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(FEMA/USACE) that you are unable to correct the levee maintenance deficiencies within the 1-year period. Therefore, the levee will not be accredited on the DFIRM.

- In a letter dated **(Insert Date)**, **(FEMA/USACE)** provided you with a 1-year correction period to remedy all levee maintenance deficiencies. FEMA required that you submit either the data and documentation required for the levee to be accredited, or a complete application for a Provisionally Accredited Levee (PAL). Please note that the 1-year correction period expired on **(Insert Date)**. Because all maintenance deficiencies were not resolved and/or necessary data and documentation were not submitted and approved before the end of the 1-year period, FEMA will be initiating a map revision to de-accredit the **(Levee Name)** and map the impacted areas on the landward side of the levee system**(s)**.
- The **(Name of Levee)** does not comply with the National Flood Insurance Program (NFIP) regulations cited in the Code of Federal Regulations (CFR) at Title 44, Chapter 1, Section 65.10 (44 CFR Section 65.10), which is required for the levee to be accredited. Therefore, FEMA will be initiating a map revision to de-accredit the **(Levee Name)** and map the impacted areas on the landward side of the levee system**(s)**.

A meeting was held with the affected communities and levee owners on **(Insert Date)** to inform you of the de-accreditation process. The area landward of the levee will be remapped as being within a Special Flood Hazard Area (SFHA). The SFHA is the area that is subject to flooding during the 1-percent-annual-chance (base) flood. The mandatory flood insurance purchase and minimum floodplain management requirements of the NFIP apply to structures within the SFHA. It is highly recommended that you consider this risk in your local emergency management plans, including creating evacuation plans for this area.

[CHOOSE APPROPRIATE PARAGRAPH:]

(FOR 1-YEAR CORRECTION PERIOD LEVEES:)
FEMA will issue the Letter of Final Determination and effective DFIRM. The DFIRM will become effective 6 months after the date of the Letter of Final Determination.

(FOR EXPIRED PAL LEVEES:)
FEMA will issue Preliminary Maps and will meet with you and the public regarding the revised maps. Following this meeting, a 90-day **(Appeal/Comment)** Period will be provided. When all **(Appeals/Comments)** are resolved, FEMA will issue the Letter of Final Determination. Final DFIRMs will be distributed that will become effective 6 months after the date of the Letter of Final Determination.

(FOR IMMEDIATELY DE-ACCREDITED LEVEES:)
FEMA will issue **[Preliminary Maps/Revised Preliminary Maps]** and will meet with you and the public regarding the revised maps. Following this meeting, a 90-day **(Appeal/Comment)** Period will be held. When all **(Appeals/Comments)** are resolved, FEMA will issue the Letter of Final Determination. Final DFIRMs will be distributed that will become effective 6 months after the date of the Letter of Final Determination.

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We encourage you to inform property owners landward of the levee of this change. FEMA has produced a variety of outreach materials which can be used to educate and inform the public about the risks associated with levees and how they can better protect themselves against those risks.

If you have questions or need additional information regarding the flood mapping for your community, please contact **(Regional Engineering Contact Name)** of my staff, by email at **(Email Address)**, by telephone at **(Regional Engineering Contact's Telephone Number: (###) ###-####)** or by facsimile at **(Regional Engineering Contact's Fax Number: (###) ###-####)**.

Sincerely,

(Regional Contact Name), (Title)
Mitigation Division

Enclosures:

cc: (Name and Title of Floodplain Administrator)
(Name and Title of State NFIP Coordinator)
(Name and Title of All Impacted Community/Communities CEO)
(Name and Title of Congressional District Offices)
(Name and Title of USACE District Office Levee Contact)

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NEWSPAPER NOTIFICATION TEMPLATE

Proposed Floodplain Boundary Modifications for **[NAME OF COMMUNITY, COUNTY, AND STATE],** associated with **[NAME OF LEVEE(S)]** along **[NAME OF FLOODING SOURCE(S)]**. The Federal Emergency Management Agency solicits technical information or comments on the proposed delineation of the floodplain boundary associated with the above listed levee(s) shown on the Preliminary Digital Flood Insurance Rate Map (DFIRM) for your community. These proposed base floodplain boundary delineations are the basis for the floodplain management measures that your community is required to either adopt or show evidence of having in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program (NFIP). To review the proposed delineations, Preliminary FIRM panels are available for inspection at **[NAME and ADDRESS OF COMMUNITY MAP REPOSITORY].** Comments from the public should be sent to **[NAME OF FLOODPLAIN ADMINISTRATOR, ADDRESS OF FPA].**

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