




**FEMA**

**FEB 27 2009**

**MEMORANDUM FOR:** Mitigation Division Directors  
Regions I - X

**FROM:**   
Doug Bellomo, Director  
Risk Analysis Division

**SUBJECT:** Procedure Memorandum No. 51  
Guidance for Mapping of Non-Levee Embankments  
Previously Identified as Accredited

**EFFECTIVE DATE:** February 27, 2009 – All studies/mapping projects for which Preliminary DFIRMs have been issued on or after August 22, 2005 and Letters of Final Determination have not yet been issued.

**Background:** One of the primary roles of the Federal Emergency Management Agency (FEMA) as administrator of the National Flood Insurance Program (NFIP) is to identify and map flood hazards from flooding sources in various locations, including areas in the vicinity of levee systems. With the August 2005 issuance of Procedure Memorandum No. 34 (PM 34), *Interim Guidance for Studies Including Levees*, FEMA reiterated the importance of investigating the status of levee systems identified on effective Flood Insurance Rate Maps (FIRMs) and Digital Flood Insurance Rate Maps (DFIRMs) being updated. As referenced in PM 34 and defined in Title 44, Chapter 1, Section 59.1 of the Code of Federal Regulations (44 CFR Section 59.1), levees are structures designed for flood control purposes to contain, control, or divert the flow of water in order to provide protection to a defined area adjacent to the floodplain.

Recently, it has been determined that areas in the vicinity of some non-levee embankments have been shown as not being subject to the base (1-percent-annual-chance) flood, even though the embankments, such as those for highways or railroads, were not designed or constructed as flood-control structures. In some cases, it may be that the embankments, while not designed to prevent flooding behind them, do have a mitigating effect on flooding.

**Issue:** Some effective FIRMs and Preliminary DFIRMs identify areas in the vicinity of non-levee embankments as not subject to the base flood. These embankments cannot be accredited in accordance with 44 CFR Section 65.10 because they are not levees. In these cases, it should be clearly demonstrated how the embankment impacts flooding in the areas around it.

Where areas in the vicinity of non-levee embankments have been shown on a Preliminary DFIRM as not being subject to the base flood and then been mapped on a subsequent Revised Preliminary DFIRM as Special Flood Hazard Areas (SFHAs), local community officials and the general public are surprised to learn that there is a previously unidentified flood risk in the impacted areas. Additionally, they are first learning of this risk relatively late in the mapping process. This causes great concern for the community and can lead to a long and difficult post-Preliminary process, as well as a lack of faith in the information presented on the new DFIRM.

**Action Taken:**

The procedure presented below applies to studies/DFIRMs that meet both of the following criteria:

1. An area was incorrectly identified as not subject to the base flood on a Preliminary DFIRM issued after August 22, 2005 (the issuance date for PM 34),
2. A sound technical justification for the delineation of the flood hazards in the vicinity of the embankment is unavailable.

FEMA will contact community officials in all impacted communities to inform them that the previously issued Preliminary DFIRM is under review and that the non-levee embankment is being re-evaluated. FEMA will also explain the process that will follow. A template that may be used to make this initial contact with an impacted community is provided in Attachment A.

As soon as technical data supporting the change is developed and draft work maps for the revised DFIRM are completed, FEMA will hold a meeting with the impacted community or communities and present the information used to identify the SFHA. FEMA will also provide the analysis performed in reaching its conclusion to identify the area as SFHA. FEMA will provide a period of 30 days after presenting the work map and data for the officials of the impacted community/communities to review the study and, if desired, commit in writing to perform a more detailed study of flood hazards for the area. This study is to be performed solely to analyze the impact the embankment has on the SFHA and not to undertake improvements to the non-levee embankment. A template that may be used to make a follow-up contact with an impacted community is provided in Attachment B.

**Procedure for Situation Where Community Does Not Agree To Undertake Further Study**

If community officials do not choose to commit to providing additional analysis and mapping within 30 days of being presented with work maps and data, FEMA will issue the Revised Preliminary DFIRM panels and Flood Insurance Study (FIS) report as soon as they are completed following the meeting. The Revised Preliminary version of the DFIRM will be based on the draft work maps and data discussed at the meeting. Following issuance of the Revised Preliminary DFIRM and FIS report, FEMA will follow standard flood mapping processes and procedures, including the initiation of 90-day appeal periods for new or modified BFEs.

Procedure for Situation Where Community **Does Agree** To Undertake Further Study

If community officials do choose to commit in writing to perform a more in-depth analysis within the 30-day timeframe, FEMA will suspend issuance of a Revised Preliminary DFIRM for 12 months and will issue a letter to this effect. The letter will recommend that development permits not be issued until flood hazards for the area are more accurately defined and encourage local property owners to purchase flood insurance. Further, the letter will clearly state that the data that the community officials would like to have incorporated into the pending Revised Preliminary DFIRM must be postmarked no later than 10 months from the due date of the agreement.

If the results of the new analysis are received within 10 months of the local agreement due date, FEMA will review and incorporate the data as part of a Revised Preliminary DFIRM, as appropriate. If the results of the new analysis are received after 10 months, FEMA will not be able to reflect the information on the Revised Preliminary DFIRM, but if they are received within 16 months of the local agreement due date, FEMA will reflect the data on the final DFIRM. If the data are provided after 16 months, FEMA will not have time to reflect it on the final DFIRM, however, FEMA will use the data, as appropriate, to process a revision to the DFIRM as soon as possible.

Completion of Map Project

As stated above in this memorandum, once FEMA issues the Revised Preliminary DFIRM, FEMA will proceed with the standard map processing and post-preliminary processing procedures, including the initiation of 90-day appeal periods for new or modified BFEs.

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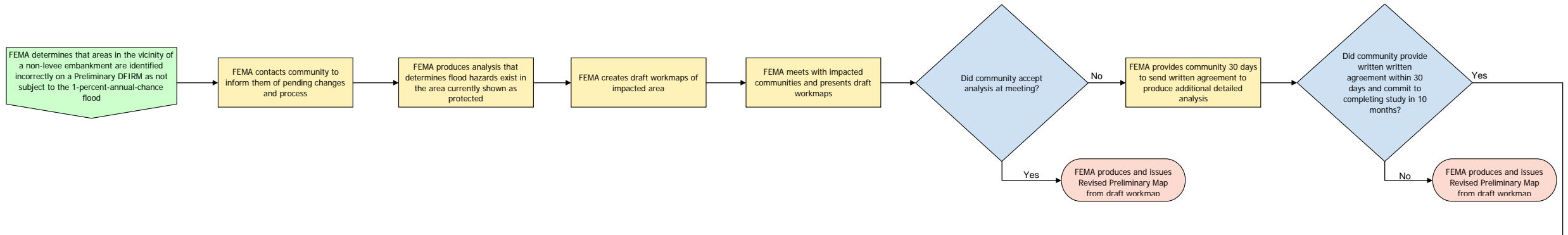
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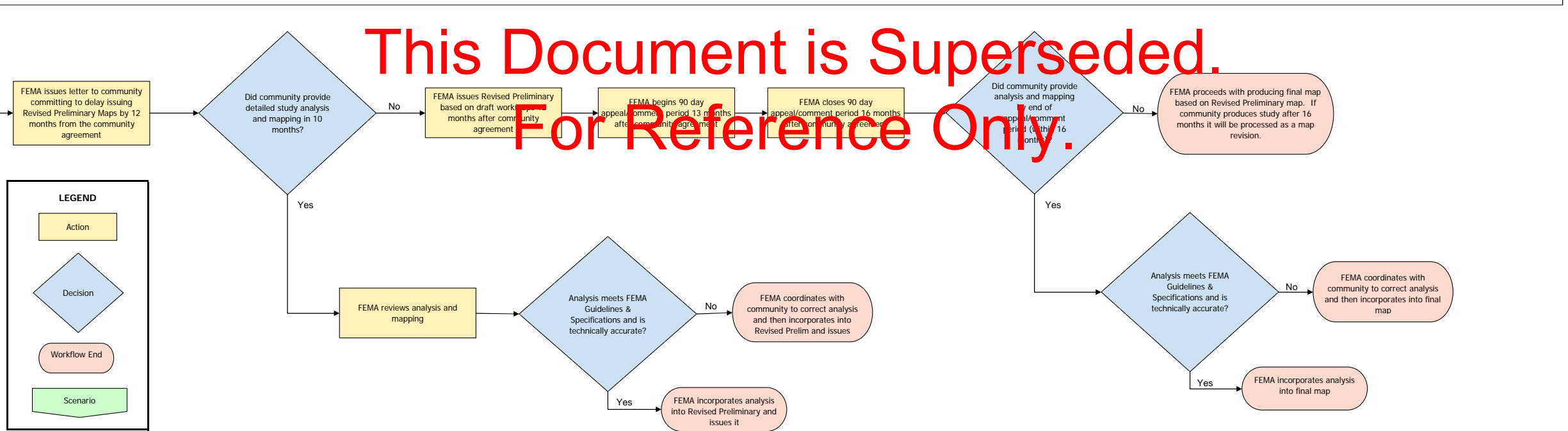
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Procedure Memo 51  
Procedural Timeline and Workflow



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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.