



Provisionally Accredited Levees

October 3, 2006



FEMA



Provisionally Accredited Levees

Overview

Approximately one quarter of the counties that the Federal Emergency Management Agency (FEMA) is mapping as part of its Flood Map Modernization (Map Mod) effort have levees shown on their effective flood map. This affects millions of Americans. Therefore, the need to accurately show the risk of flooding behind levees is obvious. Citizens, community officials, builders, insurance agents, lenders, and others need to understand the risk to life and property that resides behind levees—risk that even the best flood-control system can not completely eliminate.

It is important to note that FEMA does not perform levee evaluations—this is the responsibility of the levee owner. A levee owner can be a Federal or State agency, a water management or flood control district, a local community, a levee district, a non-public organization, or an individual. The party responsible for operating and maintaining the levee must be a Federal or State agency, an agency created by Federal or State law, or an agency of a community participating in the National Flood Insurance Program (NFIP).

FEMA is responsible for the following:

- Establishing appropriate risk zone determinations and reflecting these determinations on flood maps
- Establishing mapping standards, including minimum design, operation and maintenance criteria that must be met to have a levee recognized as providing flood protection. FEMA will only recognize on its flood maps those levee systems that have met and continue to meet these minimum standards

FEMA is not responsible for the following:

- Designing, operating, certifying, or maintaining levee systems
- Examining levees
- Determining how a structure or system will perform in a flood event

What is a levee?

A levee is a man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

What is a Provisionally Accredited Levee (PAL)?

A levee that FEMA has previously credited with providing 1-percent-annual-chance protection on an effective FIRM or DFIRM, for which FEMA is awaiting data and/or documentation that will show the levee's compliance with Section 65.10 of the NFIP regulations. A PAL is shown on a DFIRM as providing 1-percent-annual-chance flood protection, and the area landward of the levee is shown as Zone X (shaded) on a flood map except for areas of residual flooding such as ponding areas which will be shown as Special Flood Hazard Area.

FEMA's mapping requirements are designed to provide the people living and working behind the levee with appropriate risk information so that they may minimize damage and loss of life. The requirements contain the technical information on design criteria as well as operation and maintenance plans. The regulatory requirements for FEMA to recognize the flood protection capabilities of levees are found in Title 44, Chapter 1 of the Code of Federal Regulations, Section 65.10 (44 CFR Section 65.10), which you may view on FEMA's Web site at www.fema.gov/plan/prevent/fhm/lv_fpm.shtm.

Compliance with Section 65.10 requirements rests with communities, levee owners, and/or local project sponsors—not FEMA. A levee owner can be a Federal or State agency, a water management or flood control district, a local community, a levee district, a non-public organization, or an individual. The party responsible for operating and maintaining the levee must be a Federal or State agency, an agency created by Federal or State law, or an agency of a community participating in the NFIP. FEMA's responsibility is solely to review the information provided and either credit the levee with providing 1-percent-annual-chance flood protection on the flood map or, when the levee is shown to be inadequate, to reveal the risk of flooding behind that levee to the community and the public.

To help clarify its evaluation and mapping requirements for areas behind levees, FEMA has issued two Procedure Memorandums—Procedure Memorandum No. 34 (PM 34) and Procedure Memorandum No. 43 (PM 43). You may view the PMs on FEMA's Web site at www.fema.gov/plan/prevent/fhm/gs_memos.shtm.

On August 22, 2005, FEMA issued PM 34 – *Interim Guidance for Studies Including Levees* – to help clarify the responsibility of community officials or other parties seeking recognition of a levee in providing information on levees identified during a study/mapping project. PM 34 provided clarification of procedures to minimize delays in near-term study/mapping projects and to aid mapping partners in properly assessing how to handle levee mapping issues.

Documentation required to credit a levee with providing 1-percent-annual-chance flood protection often is outdated or missing altogether. As part of a study/mapping project, PM 34 indicates that it is the levee owner or community's responsibility to provide documentation that the levee meets the requirements of Section 65.10.

Levees that are reasonably expected to provide 1-percent-annual-chance flood protection can be given the Provisionally Accredited Levee, or PAL, designation on a Digital Flood Insurance Rate Map (DFIRM). Areas landward of levees that provide 1-percent-annual-chance flood protection are mapped with a Zone X (shaded) flood insurance risk zone designation. PM 43 – *Guidelines for Identifying Provisionally Accredited Levees* – describes five scenarios (see below) for determining when a levee does or does not qualify for the PAL designation.

If the levee qualifies for the PAL designation, FEMA will provide the community 90 days to sign and return an agreement that indicates the full documentation for Section 65.10 will be provided within 24 months of the signed agreement. If the signed agreement is not returned to FEMA within 90 days, the levees in the community are no longer eligible for the PAL designation. If the levee does not meet the PAL requirements, the area landward of the levee will be remapped as Zone AE or Zone A depending on the type of study performed for the area.

It is important that communities and individuals have the most accurate and up-to-date information to make decisions based on the flood risk that exists in areas behind levees. FEMA established this approach to allow the mapping to move forward for those levees meeting the criteria as identified below for the applicable scenario and to give the communities and levee owners a specified timeframe for the submittal of the full documentation necessary to show compliance with Section 65.10.

Below are five possible scenarios for how PM 43 may be applied in different circumstances.

Scenario A

In this scenario, a levee that is not in the U.S. Army Corps of Engineer's (USACE's) Federal System (i.e., a non-Federal levee) is shown on the effective flood map as providing protection from the 1-percent-annual-chance flood.

Non-Federal levees are defined to include the following:

- Levees not authorized by Congress or other Federal agency authority;
- Levees built by other (non-USACE) Federal agencies and not incorporated into the USACE Federal System;
- Locally built and maintained levees built by a local community; and
- Privately built by non-public organization or individual and maintained by a local community.

In this case, the FEMA Regional Office will send a letter to the appropriate levee owner or community identifying those levees for which Section 65.10 documentation is needed and provide a copy of this letter to the appropriate USACE district. The FEMA letter will describe the PAL option and request the community and/or levee owner to sign an agreement indicating that to the best of their knowledge the levee in question meets Section 65.10 requirements.

The community and/or levee owner will be given 90 days to return the signed agreement to FEMA and the requirements for Section 65.10 must be submitted within 24 months of the date of the agreement. If the signed agreement is not returned to FEMA within 90 days, the community is no longer eligible for the PAL designation. If the full requirements of Section 65.10 are readily available, FEMA will request that the levee owner and/or community provide these documents within 30 days. Certification by a Professional Engineer must accompany the submitted Section 65.10 data stating that the data and documentation submitted at the time of the original study are still pertinent and meet the requirements of Section 65.10 (e).

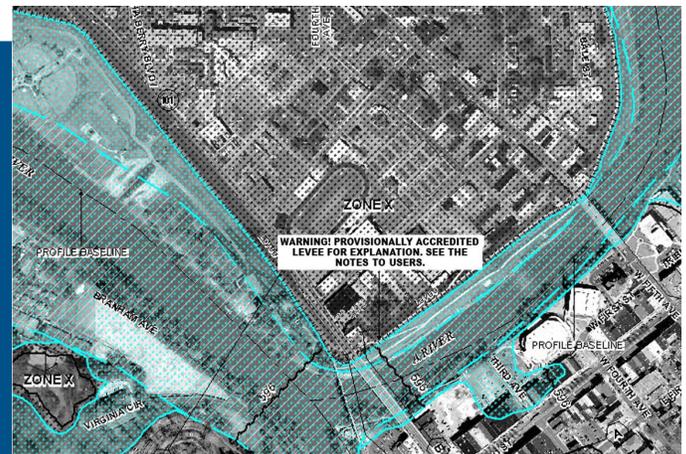
If the full documentation for Section 65.10 is not provided within 24 months of the date of the signed agreement, the area landward of the levee will be remapped and shown as Zone AE or Zone A on the flood map depending on the type of study performed for the area. A progress report must be provided to FEMA after 12 months to document the progress toward obtaining Section 65.10 data.

The following note will be shown at several locations in or near the Zone X (shaded) area on the landward side of the levee on the flood map:

WARNING: Provisionally Accredited Levee. For explanation, see the Notes to Users.

The following Note to Users will be added:

WARNING: This levee, dike, or other structure has been provisionally mapped as providing protection from the 1-percent-annual-chance flood. The levee owner or community is required to submit documentation necessary to comply with 44 CFR Section 65.10 by (_____, ____). Because of the risk of overtopping or failure of the structure, communities should take proper precautions to protect lives and minimize damages in these areas, such as issuing an evacuation plan and encouraging property owners to purchase flood insurance.



DFIRM Showing a PAL

Scenario B

In this scenario, the levee is in the Federal System (i.e., a Federal Levee) and is shown on the effective flood map as providing protection from the 1-percent-annual-chance flood. Additionally, the project inspection rating is within an acceptable range (as defined by USACE).

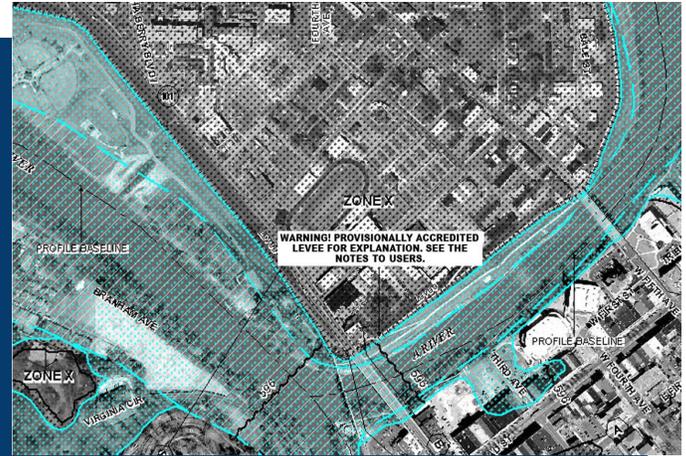
Federal levees are defined to include:

- Levees built by the USACE that were authorized for construction by Congress or by USACE continuing authorities (e.g., Section 205);
- Levee projects constructed by non-Federal interests, or other (non-USACE) Federal agencies, and incorporated into the USACE Federal System by specific Congressional action;
- Federal projects that are either operated and maintained by the USACE or turned over to a local sponsor for operation and maintenance; and
- Non-Federal projects within the Rehabilitation Inspection Program (Public Law 84-99).

The FEMA Regional Office will send a letter to the appropriate levee owner, community, and/or local project sponsor identifying those levees that meet the above criteria and qualify for the PAL designation. The FEMA letter will describe the PAL designation and request that the community sign an agreement indicating that to the best of their knowledge the levee in question meets Section 65.10 requirements. The community and/or levee owner will be given 90 days to return the signed agreement to FEMA and the requirements for Section 65.10 must be submitted within 24 months of the date of the agreement. If the signed agreement is not returned to FEMA within 90 days, levees in the community are no longer eligible for the PAL designation.

If the full requirements for Section 65.10 are readily available, the levee owner, community, and/or local project sponsor will be requested to provide these documents to FEMA within 30 days. Certification by a Professional Engineer must accompany the submitted Section 65.10 data stating that the data and documentation submitted at the time of the original study are still pertinent and meet the requirements of Section 65.10 (e). An official letter from the USACE certifying that the levee has been adequately designed and constructed to provide protection against the 1-percent-annual-chance flood may also be submitted in lieu of the certification noted above.

If the full documentation for Section 65.10 is not provided within 24 months of the date of the agreement, the area landward of the levee will be remapped and shown as Zone AE or Zone A depending on the type of study performed for the area. A progress report must be provided to FEMA after 12 months to document the progress toward obtaining Section 65.10 data.



DFIRM Showing a PAL

Scenario C

In this scenario, the levee is in the Federal System (i.e., a Federal Levee) and is shown on the effective flood map as providing protection from the 1-percent-annual-chance flood. However, the USACE has determined that the levee's recent inspection ratings are "Fair," "Poor," or "Unacceptable," and project was switched to "Inactive" in the USACE's Rehabilitation and Inspection Program.

The FEMA Regional Office will coordinate with the USACE, who will send a letter to the community, levee owner, or local project sponsor stating that the area behind the levee has been switched from an active to an inactive status in the USACE Rehabilitation and Inspection Program and is no longer eligible for P.L. 84-99 Rehabilitation Assistance because of maintenance deficiencies. These deficiencies will not allow the levee to meet the minimum requirements of Section 65.10 and, subsequently, does not provide 1-percent-annual-chance flood protection. The FEMA Regional Office then will send a letter notifying the community, levee owner, or local project sponsor that the area behind the levee will be remapped using Zone AE or Zone A if the levee does not provide 1-percent-annual-chance flood protection. Because the levee does not provide 1-percent-annual-chance flood protection, it does not qualify for the PAL designation.

