

# Provisionally Accredited Levee Systems

## What Happens When the “PAL Expiration Date” Is Reached

### INTRODUCTION

As administrator of the National Flood Insurance Program (NFIP), one of the primary responsibilities of the Department of Homeland Security, Federal Emergency Management Agency (FEMA) is providing communities with up-to-date, accurate, and reliable flood hazard and risk information on Digital Flood Insurance Rate Maps (DFIRMs). As part of this effort, FEMA has been working, and continues to work with Federal, State, and local professionals and technical partners to determine the flood protection and risk-reduction capabilities of levee systems nationwide and to accurately reflect the flood hazard and risk in “levee-impacted” areas on DFIRMs.

FEMA also has issued guidance to clarify requirements for submitting data and documentation to meet NFIP regulatory requirements for the evaluation and mapping of levee systems and levee-impacted areas. FEMA issued the guidance as Procedure Memorandums, Fact Sheets, Frequently Asked Questions documents, and brochures, all of which are accessible through the FEMA Web site. The gateway to the FEMA-provided information, organized by stakeholder group, is: [www.fema.gov/plan/prevent/fhm/lv\\_intro.shtm](http://www.fema.gov/plan/prevent/fhm/lv_intro.shtm).

FEMA developed this Fact Sheet to explain NFIP requirements further, with specific emphasis on what happens when the 24-month period for submitting data and documentation to show a levee system’s compliance with the NFIP regulations expires.

**What is a levee system?** A levee system is a flood protection system that consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

**What is a levee?** A levee is a manmade 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.

**Does a levee system provide protection from all flood events?** No levee system provides full protection from all flooding events. Levee systems are designed to provide a *specific level of protection*. They can be overtopped or fail during larger flood events. To retain the design level of flood protection and risk reduction, levee system owners must perform regular maintenance and periodic upgrades.

**What happens when levee systems fail?** When levee systems do fail, they often fail catastrophically, and the resulting damage, including loss of life, may be more significant than if the levee system had not been built. Therefore, everyone should understand the risk to life and property that exists in levee-impacted areas—risk that even the best flood protection system cannot eliminate completely.

### APPLICABLE REGULATIONS

The NFIP regulatory requirements for the evaluation and mapping of levee systems are cited in the Code of Federal Regulations (CFR) at Title 44, Chapter 1, Section 65.10 (44 CFR Section 65.10). You may access 44 CFR Section 65.10 through the FEMA Web site at [www.fema.gov/plan/prevent/fhm/lv\\_fpm.shtm](http://www.fema.gov/plan/prevent/fhm/lv_fpm.shtm).

### ROLES AND RESPONSIBILITIES

FEMA’s primary responsibilities are as follows:

- Provide guidance regarding the NFIP regulatory and procedural requirements related to levee systems;
- Review the data and documentation submitted by others in compliance with those requirements;
- Accredit a levee system on the NFIP map (i.e., DFIRM) when the adequacy of the system is supported by required data and documentation; and
- De-accredit or not accredit a levee system to reflect the increased risk of flooding to people and structures in the levee-impacted areas on the DFIRM when submitted data and documentation show the system is inadequate or data and documentation cannot be provided.



FEMA is *not* responsible for building, maintaining, operating, or certifying levee systems. Thus, communities, levee system owners, and/or local project sponsors—not FEMA—must meet and maintain compliance with 44 CFR Section 65.10 requirements if a levee system is to be accredited on a DFIRM.

A levee system 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 system 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.

## PROCEDURE DOCUMENTATION

FEMA developed Appendix H of *Guidelines and Specifications for Flood Hazard Mapping Partners* to implement the requirements in 44 CFR Section 65.10. To clarify the regulatory and procedural requirements for FEMA contractors and mapping partners, FEMA has issued five Procedure Memorandums, summarized below.

- **Procedure Memorandum No. 34 (PM 34)**, issued on August 22, 2005, clarifies that it is the levee system owner or community’s responsibility to provide data and documentation to show that a levee system meets 44 CFR Section 65.10 requirements and provides clarification on procedures to minimize delays in near-term studies/mapping projects and to aid project teams in properly assessing how to handle levee system-related mapping issues.
- **Procedure Memorandum No. 43 (PM 43)**, originally issued on September 25, 2006, provides guidance on issuing preliminary and final effective DFIRMs, while providing communities/levee system owners with additional time to compile and submit the data and documentation required to show compliance with 44 CFR Section 65.10. PM 43 established the concept of “Provisionally Accreditation Levee” or “PAL,” systems.

Issued on March 16, 2007, the revised version of PM 43 includes guidance on evaluating levee systems that the U.S. Army Corps of Engineers determined to be “maintenance deficient” and to

offer a one-time-only 1-year “maintenance deficiency correction period.”

- **Procedure Memorandum No. 45 (PM 45)**, issued on May 12, 2008, provides updated guidance on the notes that will appear on DFIRM panels on which levee systems and levee-impacted areas are shown.
- **Procedure Memorandum No. 52 (PM 52)**, issued on April 24, 2009, implements updated guidelines for mapping landward of accredited, non-accredited, and de-accredited levee systems and for notifying stakeholders when levee systems are de-accredited.
- **Procedure Memorandum No. 53 (PM 53)**, also issued on April 24, 2009, provides guidelines for notification of communities/levee system owners regarding expiring PAL designations and for mapping of impacted areas.

These Procedure Memorandums are accessible through [www.fema.gov/plan/prevent/fhm/lv\\_fpm.shtm](http://www.fema.gov/plan/prevent/fhm/lv_fpm.shtm).

## PAL SYSTEM DESIGNATION

FEMA uses the PAL designation for a levee system when FEMA has previously accredited the system on an effective Flood Insurance Rate Map (FIRM) and FEMA is waiting for a community/levee system owner to submit data and/or documentation demonstrating the levee system’s compliance with 44 CFR Section 65.10.

A PAL system is shown on a DFIRM with the area impacted by the PAL system mapped as a moderate-risk area labeled Zone X (shaded), except for areas of residual flooding, such as ponding areas. FEMA maps the areas of residual flooding as high-risk areas, called “Special Flood Hazard Areas,” or “SFHAs.”

FEMA places a note on the DFIRM panel landward of the levee system to indicate FEMA has provisionally accredited the levee system and the designation of any existing Zone X (shaded) area is provisional. FEMA also adds an explanatory note in the “Notes to Users” section of the map frame. Examples of maps showing the notes are included in the Fact Sheet titled “Meeting the Criteria for Accrediting Levee Systems on NFIP Flood Maps: How-to-Guide for Floodplain Managers and Engineers,” accessible through the Web page cited above.

Before FEMA applies the PAL designation to a levee system, the community/ levee system owner signs a “PAL agreement” with FEMA. By signing the PAL agreement, the community/levee system owner indicates



the levee system complies with the requirements of 44 CFR Section 65.10 and that the data and documentation required for compliance with 44 CFR Section 65.10 will be provided to FEMA within 24 months of signing the agreement.

**Once the 24-month PAL period has been established, FEMA will not extend it for any reason.**

More detailed information on the requirements for the PAL system designation is provided in “Guidelines for Identifying Provisionally Accredited Levees,” which accompanied PM 43 and is accessible through [www.fema.gov/plan/prevent/fhm/lv\\_fpm.shtm](http://www.fema.gov/plan/prevent/fhm/lv_fpm.shtm).

## **PAL EXPIRATION DATE AND FOLLOW-ON PROCEDURES**

The “PAL Expiration Date” is the date by which a community/levee system owner must submit all required data and documentation to FEMA to show compliance with 44 CFR Section 65.10.

In advance of the PAL Expiration Date, FEMA will send a community/levee system owner two letters to remind them of the commitment made in the PAL agreement. The first letter will be sent 90 days before the PAL Expiration Date, and the second letter will be sent 30 days before the PAL Expiration Date.

On the PAL Expiration Date, FEMA will review all submitted data and documentation to determine if 44 CFR Section 65.10 requirements have been met. Based on the findings from that review, FEMA will follow one of the processes summarized below.

### **Data and Documentation Submitted Are Complete and Are Sufficient To Show Compliance with NFIP Regulatory Requirements**

If FEMA receives complete data before the PAL Expiration Date, FEMA will follow the process below.

- FEMA notifies the community/levee system owner of its determination in writing and initiates a map revision to remove the PAL system notes from the affected DFIRM panel(s).
- On the revised DFIRM panel(s), FEMA maintains the presentation of the levee-impacted area as a moderate-risk area, labeled Zone X (shaded), and replaces the PAL system map notes and Notes to User with the current map notes and Notes to Users for accredited levee systems provided in PM 45.

- For most map revisions involving only changes to the map notes and Notes to User, FEMA uses its Physical Map Revision (PMR) process; for some revisions, however, FEMA may determine that the Letter of Map Revision (LOMR) process is appropriate. The community review and comment requirements for PMRs and LOMRs are documented in Volume 2 of FEMA’s *Guidelines and Specifications for Flood Hazard Mapping Partners*.
- The affected communities update their floodplain management ordinances as appropriate and submit them to the FEMA Regional Office and the State NFIP Coordinator for approval.

### **Data and Documentation Are Not Submitted, Are Not Complete, or Are Not Sufficient To Show Compliance with NFIP Regulatory Requirements**

If FEMA does not receive the required data by the PAL Expiration Date, FEMA will follow the process below.

- FEMA notifies the community/levee system owner of its determination in writing and initiates a map revision to the affected DFIRM panel(s). No less than 18 months shall pass before the revised DFIRM is finalized.
- For the affected DFIRM panels, FEMA removes the PAL system notes and maps the levee-impacted area as a high-risk SFHA, labeled Zone A when base (1-percent-annual-chance) flood elevations (BFEs) are not depicted on the DFIRM or Zone AE when BFEs are shown.
- FEMA provides a Preliminary version of the revised DFIRM panels(s) and FIS report to the community/communities for review and provides a 30-day period to allow community officials, residents, and business owners an opportunity to comment.
- At the end of the review period, FEMA holds a formal consultation meeting with community officials. FEMA also may hold “open houses” for the public.
- After these meetings have been held and all comments have been addressed, FEMA proceeds with finalizing the revised DFIRM panel(s).
- If new or revised BFEs are shown on the affected Preliminary DFIRM panel(s) and in the Flood Profiles included in the FIS report, FEMA initiates a



statutorily required 90-day appeal period for the affected community/communities following the requirements in 44 CFR Part 67.

- If new or revised BFEs are not shown on the affected Preliminary DFIRM panel(s), FEMA publishes a levee notice in the local newspaper and initiates a 90-day comment period for the affected community/communities.
- At the end of the 90-day appeal or comment period, FEMA addresses any appeals of BFEs or other comments (including the submittal of 44 CFR Section 65.10-required data and documentation); coordinates with community officials and appellants as appropriate; and updates the affected DFIRM panel(s) and FIS report materials if required.
- If required, FEMA provides Revised Preliminary copies of the revised DFIRM panel(s) and FIS report materials to the affected community officials and appellants for review; coordinates with community officials and appellants as appropriate; and updates the affected DFIRM panel(s) and FIS report materials if required.
- FEMA issues the LFD, which notifies the affected community/communities that the DFIRM and FIS report are final; establishes an effective date; and reminds the affected community/communities that updates to their floodplain management ordinances may be required
- If FEMA receives the 44 CFR Section 65.10-required data/documentation prior to community adoption of the new maps and within 2 months of the LFD date (4 months before the new effective date), FEMA revises the affected DFIRM panel(s) to show the impacted area as a moderate-risk area, labeled Zone X (shaded).

- The affected communities update their floodplain management ordinances as appropriate based on the new DFIRM panel(s) and FIS report and submit them to the FEMA Regional Office and the State NFIP Coordinator for approval before the effective date.

## IN SUMMARY

The provisional accreditation procedures for levee systems have allowed FEMA to issue preliminary and effective versions of a DFIRM while providing the community/levee system owner a specified, reasonable timeframe (24 months) to submit the data and documentation required to show compliance with 44 CFR Section 65.10. For levee systems with maintenance deficiencies (that are otherwise believed to comply with the requirements of 44 CFR Section 65.10), the release of new DFIRMs could be placed on hold for up to 1 year to provide the community/levee system owner with additional time to correct these deficiencies.

It is critical that community officials and citizens have the most accurate and up-to-date information to make decisions based on the flood risk that exists in levee-impacted areas. **Once the 24-month PAL period has been established, FEMA will not extend it for any reason.** Therefore, when the PAL Expiration Date is reached, FEMA must begin the process of revising the affected DFIRM panel(s) and FIS report materials based on the data and documentation submitted to FEMA by that date. Even after the PAL Expiration Date is reached, however, FEMA procedures allow a community/levee system owner to submit the regulatorily required data and documentation for a de-accredited levee system for FEMA review and inclusion in preparing the final DFIRM panel(s) and FIS report materials.