



# Provisionally Accredited Levees

## Answers to Questions about Procedure Memorandum No. 43

Providing communities with up-to-date, accurate, and reliable flood hazard and risk information on Digital Flood Insurance Rate Maps (DFIRMs) is one of the primary goals of the Federal Emergency Management Agency's (FEMA's) Flood Map Modernization (Map Mod) effort. For approximately one quarter of the counties for which new or updated DFIRMs will be produced under Map Mod, levees are shown on the effective flood maps as providing flood protection. Therefore, as part of the Map Mod effort, FEMA reviewed its existing guidance regarding the submittal of the data and documentation required to meet current National Flood Insurance Program (NFIP) levee criteria and the mapping of levee-affected areas to reflect the protection provided by the levees. As a result of this review, FEMA has issued two Procedure Memorandums to clarify the evaluation and mapping requirements for areas protected by levees. The questions and answers below are provided to further explain these requirements.

### **Q: What is a levee?**

**A:** 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.

It is important to note that levees are designed to provide a *specific level of protection*. They can be overtopped or fail in larger flood events. They require regular maintenance and periodic upgrades to retain their level of protection. When levees do fail, they fail catastrophically, and the damage may be more significant than if the levee was not there. Everyone should understand the risk to life and property that resides behind levees—risk that even the best flood-control system can not completely eliminate. For all these reasons, FEMA encourages people to understand their risk.

### **Q: What is a Provisionally Accredited Levee?**

**A:** A Provisionally Accredited Levee, or PAL, is a levee that FEMA has previously credited with providing 1-percent-annual-chance flood protection on an effective flood map, 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 flood map as providing 1-percent-annual-chance flood protection, and the area landward of the levee is shown as Zone X (shaded) except for areas of residual flooding, such as ponding areas, which will be shown as Special Flood Hazard Areas (SFHAs).

### **Q: What are the requirements for evaluating and mapping areas behind levees?**

**A:** FEMA has issued two Procedure Memorandums that provide guidance for mapping areas behind levees—Procedure Memorandum No. 34 (PM 34) and Procedure Memorandum No. 43 (PM 43)—as clarification to Appendix H of FEMA's *Guidelines and Specifications for Flood Hazard Mapping Partners*. PM 43 specifically gives the details for mapping PALs. You may view these and other Procedure Memorandums on FEMA's Web site at [www.fema.gov/plan/prevent/fhm/lv\\_fpm.shtm](http://www.fema.gov/plan/prevent/fhm/lv_fpm.shtm).

### **Q: What is Procedure Memorandum No. 34? When was it issued?**

**A:** 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 on procedures to minimize delays in near-term study/mapping projects and to aid mapping partners in properly assessing how to handle levee mapping issues.



**Q: Why was PM 34 issued?**

**A:** Documentation regarding levee design, structural integrity, and other requirements for crediting a levee with providing 1-percent-annual-chance flood protection often is outdated or missing altogether. Areas landward of levees that provide 1-percent-annual-chance flood protection are mapped with a Zone X (shaded) flood insurance risk zone designation. As part of a study/mapping project, PM 34 clarifies that it is the levee owner or community's responsibility to provide documentation that the levee meets the requirements of Section 65.10. You may view Section 65.10 on FEMA's Web site at [www.fema.gov/plan/prevent/fhm/lv\\_fpm.shtm](http://www.fema.gov/plan/prevent/fhm/lv_fpm.shtm).

**Q: Who is responsible for complying with Section 65.10 of the NFIP regulations?**

**A:** 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 DFIRM or, when the levee is shown to be inadequate, to reflect the increased risk of flooding behind that levee to the community and the public.

**Q: How is PM 43 different from PM 34?**

**A:** A levee that is reasonably expected to provide 1-percent-annual-chance flood protection can be designated as a PAL on a DFIRM. PM 43—*Guidelines for Identifying Provisionally Accredited Levees*—describes five scenarios for determining when a levee does or does not qualify for the PAL designation.

Through the issuance of PM 43, FEMA has established a specified period of time that allows the community or levee owner time to collect and submit data and documentation to meet the requirements of Section 65.10 before the levee is shown on the DFIRM as not providing 1-percent-annual-chance flood protection. 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 community is 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 an SFHA, designated Zone AE or Zone A depending on the type of study performed for the area.

**Q: Will adhering to PM 43 delay the release of new DFIRMs?**

**A:** 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. PM 43 gives community officials and the public the most current flood hazard and risk information while the community or levee owners are given a reasonable amount of time to compile and submit data and documentation to show compliance with the requirements of Section 65.10. At the same time, PM 43 minimizes the impact on Map Mod map production goals.

**Q: What if a levee meets the PAL requirements of PM 43?**

**A:** Effective on the date of PM 43, for levees that meet the PAL requirement (levees presently shown as providing 1-percent-annual-chance flood protection on the effective flood map) and for which the community or levee owner cannot readily provide the full data and documentation required by Section 65.10, a note will be placed on the map panel landward of the levee to indicate the levee is provisionally accredited and the designation of any existing Zone X (shaded) area is provisional. If there is no existing Zone X (shaded) area on the effective flood map, then the mapping partner should define the provisional Zone X (shaded) area using the best available data. To meet the PAL requirements, the following conditions must be met:

- Areas must be shown as providing 1-percent-annual-chance flood protection on the effective flood map.
- Levees must have no known issues.
- Full documentation of the levee's compliance with Section 65.10 requirements is not readily available from the community or levee owner.



**Q: How will a PAL be identified on a DFIRM?**

**A:** To identify the PAL, the following note will be applied at several locations, point to the levee, and be placed landward of the levee on the flood map in or near the Zone X (shaded) area:

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

The following note will be added to the Notes to Users:

WARNING: This levee, dike, or other structure has been provisionally mapped as providing protection from the 1-percent-annual-chance flood. In order to maintain this accreditation, 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.

**Q: How does FEMA determine if a levee meets the requirements of PM 43?**

**A:** The FEMA requirements are documented in a guidance document entitled, “Guidelines for Identifying Provisionally Accredited Levees (PAL).” This document contains descriptions of different mapping scenarios and is available on FEMA’s Web site at [www.fema.gov/plan/prevent/fhm/lv\\_fpm.shtm](http://www.fema.gov/plan/prevent/fhm/lv_fpm.shtm).

For levees that are included in the U.S. Army Corps of Engineers (USACE) Federal System, FEMA will coordinate with the appropriate USACE district to determine which levee does not provide protection from the 1-percent-annual-chance flood. This collaborative effort shall evaluate existing data or project-specific information to identify and validate non-accrediting levees in the USACE’s inventory.

**Q: What qualifies as a USACE Federal Levee System?**

**A:** Levees within the Federal System are defined to include the following:

- 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).

**Q: What qualifies as a Non-Federal Levee System?**

**A:** 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.