Release of EC 1110-2-6067
“USACE Process for the National Flood Insurance Program (NFIP) Levee System Evaluation”

Frequently Asked Questions

1. What does Engineer Circular (EC) 1110-2-6067, USACE Process for the National Flood Insurance Program (NFIP) Levee System Evaluation, address?

The EC provides a consolidated document that will guide US Army Corps of Engineers (USACE) procedures for levee system evaluations in support of National Flood Insurance Program (NFIP) as administered by the Federal Emergency Management Agency (FEMA). This EC supplements and clarifies existing policy, procedures, and technical guidance. Technical and procedural guidance in this EC are intended solely for use in USACE process for NFIP levee system evaluations of existing and new levee systems; it is not intended as design guidance.

2. What is a ‘NFIP levee system evaluation’?

The purpose of a NFIP levee system evaluation is to determine how flood hazard areas behind levees are mapped on FEMA Flood Insurance Rate Maps (FIRMs). The resultant maps are used to determine flood insurance rates; federal, state, and local floodplain management requirements; and other floodplain management decisions. It should be noted here that the definition of ‘NFIP levee system evaluation’ for the purposes of USACE application under this EC is consistent with definitions in 44 CFR 65.10. If a positive finding is made in an NFIP levee system evaluation, FEMA will use this information to determine how the floodplain behind the levee system is mapped.

A **NFIP levee system evaluation determination** is a technical finding by a registered professional engineer that, for the floodplain in question, there is, or is not, a reasonable assurance that the levee system will exclude the 1% annual chance exceedance flood from the leveed area. A ‘there is’ answer leads to a positive finding and support for accreditation. An ‘is not’ answer means a negative finding for NFIP levee system evaluation thus, accreditation is not supported.

3. What is the difference among levee evaluation, certification, inspection, and accreditation?

With the release of this EC, USACE will begin using “NFIP levee system evaluation” as opposed to “levee certification” to describe the process USACE is following to evaluate a levee system for NFIP mapping purposes.

“Levee Certification” is commonly used to describe the submittal of all required data to FEMA to demonstrate the levee meets requirements in 44 CFR 65.10.
Inspection of a levee, as related to USACE’s Levee Safety Program, is a visual inspection conducted to verify that the levee system is being properly operated and maintained. The result of these inspections does not equate to a “levee certification” or “NFIP levee system evaluation.”

Accreditation means FEMA has verified that all the documentation to demonstrate that a levee system meets 44 CFR 65.10 has been submitted and has shown the levee on the Flood Insurance Rate Map (FIRM) as providing reasonable assurance of excluding the 1% annual chance exceedance flood (or base flood).

4. **Why is USACE using the term “NFIP levee system evaluation” instead of “levee certification”? Do these two terms mean the same thing?**

“NFIP levee system evaluation” emphasizes the true purpose of evaluating the complete levee system’s status with regard to requirements of both 44 CFR 65.10 and USACE guidelines. This choice better supports FEMA’s definition of “certification” defined in 44 CFR 65.2(b), which focuses on certification of analysis and data and is not meant to imply a warranty or guarantee. This change does not affect FEMA’s requirements for mapping areas behind levee systems. The change, however, better describes the purpose and emphasis that “certification” does not mean a guarantee of safety from flooding.

5. **Does this EC apply to all “levee certifications” submitted to FEMA?**

No. It only applies to NFIP levee system evaluations performed by USACE.

6. **Will FEMA accept documentation from USACE using the term “NFIP Levee System Evaluation” instead of “levee certification”?**

Yes. In 44 CFR 65.10, states, “In lieu of these structural requirements, a Federal agency with responsibility for levee design may certify that the levee has been adequately designed and constructed to provide protection against the base flood.” USACE developed the EC to outline the process it will follow to meet this statement of the CFR. However, instead of using “certify”, USACE will state “has met all the requirements established by USACE for determining that the levee system can be reasonably expected to exclude a flood event with a 1% annual chance exceedance...” or “USACE finds the levee system is not in accordance with all of the NFIP levee system evaluation requirements established by USACE for determining that the levee system can be reasonably expected to exclude a flood event with a 1% annual chance exceedance.”

7. **If a private architect-engineer firm would like to use this USACE EC, does the term “levee certification” or the word “certify” have to be in the documentation they submit to FEMA to comply with 44 CFR 65.10?**

No. The purpose of “certification” is defined by FEMA in 44 CFR 65.2(b) as follows,

“For the purpose of this part, a certification by a registered professional engineer or other party does not constitute a warranty or guarantee of performance, expressed or implied. Certification
of data is a statement that the data is accurate to the best of the certifier's knowledge. Certification of analyses is a statement that the analyses have been performed correctly and in accordance with sound engineering practices. Certification of structural works is a statement that the works are designed in accordance with sound engineering practices to provide protection from the base flood. Certification of “as built” conditions is a statement that the structure(s) has been built according to the plans being certified, is in place, and is fully functioning.”

For example, FEMA will accept statements, accompanying the required backup data and information, from a professional engineer such as “To the best of my knowledge, the __________ levee system has been designed and constructed in accordance with sound engineering practices to provide protection from the base flood, is in place, is fully functional, and meets the requirements of 44 CFR 65.10 as demonstrated by the attached supporting documentation.”

8. Is FEMA planning to change how it uses the term “levee certification” to match the USACE new term of “NFIP levee system evaluation”?

FEMA will continue to implement 44 CFR 65.10 as written, but supports the USACE EC. The EC only applies to USACE NFIP levee system evaluation efforts and complements the CFR.

9. What happens to the draft Engineer Technical Letter (ETL) 1110-2-570 that USACE issued in September 2007 to address “certification”?

The EC supersedes this draft ETL and all other related policy memoranda related to “certification”. The draft ETL (1) provided interim guidance to Corps offices for their use in supporting the FEMA NFIP, and (2) provided an opportunity to solicit comments and suggestions for improving the content and applicability of the ETL. The review generated more than 1,100 comments which were addressed and incorporated into the EC. After the review, the policy and guidance that evolved aligned better with an EC than an ETL (per OM 25-1-51).

10. Does the EC contain “new” guidance not presently contained in other published USACE documents?

The EC consolidates and summarizes existing policy and guidance previously distributed among various USACE documents and provides policy and guidance about topics not previously covered in relation to “levee certifications”, such as,

a. Use of “NFIP levee system evaluation” rather than “certification” as it emphasizes the complete levee system’s status with regard to requirements of both 44 CFR 65.10 and USACE guidelines.
b. Requiring submittal to FEMA of an evaluation report, as opposed to issuing just a “certification” letter.
c. Clarification of technical areas to include earthen closures, ice, seismic criteria, channels, and flood fight activities.
d. Requiring a minimum of two feet of freeboard to match FEMA’s minimum requirement.
11. With this EC, is USACE changing its policy related to performing NFIP levee evaluations for local sponsors?

No. The purpose of these levee evaluations is to determine how FEMA will map the floodplain behind the levee for flood insurance purposes as part of the NFIP. Since the local community is responsible for administering the requirements of the NFIP and maintaining the levee, providing the documentation to meet 44 CFR 65.10 is a local project/system sponsor responsibility. In some cases, USACE Levee Safety Program activities will help inform and support the local’s efforts.

There are two conditions when USACE will budget for and conduct these evaluations when requested by the local sponsor: (1) USACE operates or maintains the levee system (such as the Mississippi River & Tributaries levees) or (2) USACE has an active levee design/construction project underway (such as New Orleans).

USACE may perform this evaluation using funds provided by non-Federal sponsors, provided that it can be demonstrated that USACE is uniquely equipped to do so and that such services are not reasonably and quickly available through ordinary business channels (Thomas Amendment).

Consult ER 1140-1-211, Work for Others – Support for Others: Reimbursable Work, 22 June 1992 for situations involving other federal agencies providing funds for this work.

12. How does the EC relate to FEMA’s Title 44 of the Code of Federal Regulations, Section 65.10 (44 CFR 65.10), Mapping Areas Protected by Levee Systems?

CFR 65.10, published in the mid-1980s, is the basic FEMA regulation prescribing requirements and criteria for levee system evaluations (certifications). CFR 65.10 requires that structural components of the levee system be certified by a registered professional engineer. A provision of the regulation permits federal agencies, such as USACE, with levee design and construction competence to make certification determinations. EC 1110-2-6067 is consistent with and founded on the principles of 44 CFR 65.10 while updating methods and references to current USACE practices and criteria.

13. What coordination with FEMA has taken place with this EC?

The first USACE national guidance related to levee system evaluation (formerly certification) was issued in April 1997. This policy, coordinated with and accepted by FEMA, required the use of risk analysis (statistically-based levee height) for levee system evaluations performed by USACE. Since then, all supplemental USACE guidance for levee system evaluation has been coordinated with FEMA. For this EC, FEMA was a partner on the Project Delivery Team (PDT) and the Independent Technical Review process. Joint USACE/FEMA regional webinars will be conducted as part of the release of this EC.
14. Is there a plan to revise and update the EC in the near future as lessons learned from Katrina/New Orleans become more solidified, and as the technical methods advance both in the U.S. and Internationally?

Yes, we anticipate there will be periodic updates as advances are made in the engineering profession in relation to flood and hurricane storm damage reduction systems. Hurricanes Katrina and Rita brought the subject of flood risk management to the forefront of public interest and debate. Lessons learned from these events include the need to apply a systems approach and risk-informed decision making to flood risk management. Flood risk management is dynamic and constantly changes as we learn more about floods, storms and subsidence; the performance of our aging infrastructure; the engineering profession and the effects of increasing development behind flood and storm damage reduction systems. USACE is constantly working to improve its understanding of the loading on levee systems, how they respond to floods, and to advance the state-of-the-art of design and construction. The EC will be incrementally improved to incorporate these new advances.

15. What happens to existing previous USACE “certifications”?

District offices will assess situations in which USACE documentation was submitted to FEMA and was used by FEMA for accreditation of the levee system in order to ensure policy in the EC has been met. If the existing USACE documentation is not in compliance with the EC, USACE will notify the sponsor and FEMA that the current USACE documentation on file can no longer be used to support the current accreditation.

16. Who is the point of contact for the EC?

Questions regarding this EC should be directed to the district Levee Safety Officer (LSO) or district Levee Safety Program Manager (LSPM).