

Levee Certification for the National Flood Insurance Program (NFIP)
USACE Fact Sheet
10-2-2006

1. Levee Certification Defined: Levee certification is a technical finding for floodplain mapping purposes as part of the National Flood Insurance Program (NFIP), that concludes there is reasonable certainty that the levee protecting the area will contain the base (1% annual chance exceedance, sometimes referred to as the 100-year) regulatory flood. The certification finding must be accomplished by either a registered professional engineer or a Federal agency with levee design and construction qualifications such as USACE.

2. Responsibilities: The responsibility for seeking levee certification is that of the local agency with jurisdiction over the floodplain in question. The local agency may perform the certification analysis with staff or consultants, or may request such technical determination by others. FEMA does not certify levees; instead, FEMA is the recipient of levee certification determination documentation forwarded by the local agency. If levee certification documentation is found to be in order, FEMA will then accredit the levee and the associated flood insurance rate maps depicting flood hazard will show the floodplain areas as protected from the base (regulatory) flood.

3. Levee Certification Policy: The basic policy governing levee certification for NFIP was issued by FEMA in 1986 as 44 CFR 65.10. This policy requires complete engineering analysis of hydrology, hydraulics, structural and geotechnical, and operations and maintenance of the levee undergoing study for certification determination. In 1997, USACE issued an internal levee certification policy, which supplements 44 CFR 65.10 by requiring application of its risk analysis policy to levee certification. The 1997 policy letter was updated in 2006 with issuance of two letters further clarifying USACE policies of levee certification for FEMA's Map Modernization (Map Mod) Program and documenting authorities and possible funding sources for USACE execution of the studies. FEMA issued Procedure Memorandum 34 in mid-2005 requiring new and/or re-certification of all levees that would be accredited on new FEMA Digital Flood Insurance Rate Maps (DFIRMS) being developed under Map Mod.

4. USACE Authority and Funding Guidance: Following paragraphs summarize present guidance.
 - a. USACE will provide levee certification determinations for levees that it owns and operates, e.g. Mississippi River and Tributaries system.
 - b. Upon request, USACE has authority to provide levee certification determination for levees in the USACE Inspection of Completed Works Program. The certification determination may be funded via ICW funds if available. Otherwise, funding may be provided by the requester via Economy Act or Support for Others agreements.
 - c. Upon request, USACE has the authority to provide levee certification determination for levees in the USACE Rehabilitation and Inspection Program (RIP) – non-Federal levees which meet USACE RIP criteria and have been accepted into the

program. The certification determination must be funded via Economy Act or Support for Others program.

d. Upon request, USACE has authority to provide levee certification determinations for projects constructed by other Federal agencies. The certification determination must be funded via Economy Act agreements.

e. Authority exists to perform levee certification determinations as part of a cost-shared study or for projects in the study or design phase. Project appropriated funds may be used.

f. USACE does not have authority to perform levee certification for non-Federal projects, which are not within a USACE program or part of a study or project.

g. For any levee, USACE has authority to provide technical analysis and support via the Flood Plain Management Services Program (FPMS) subject to available appropriated funds or via voluntary contributions.

5. USACE Technical Guidance: The state of certification-related USACE technical guidance is best characterized as outdated, incomplete, and containing substantial gaps. None-the-less, levee certifications need to be undertaken now since work cannot wait for guidance to be updated and perfected. It is necessary to provide interim guidance that documents what is expected for a contemporary levee certification analysis. An ETL is planned to be issued in the coming year that will clarify for USACE field offices the guidance that is currently adequate and should be followed, guidance that is outdated wherein other/newer concepts need to be considered and where such material may be located, and to provide definitive guidance on process and documentation.

6. Levee Inventory and Risk Assessment Initiative: The objective of this program is to provide a living database repository of information relative to the status and safety of the nation's levee system and together with assessment methods under development, provide a consistent risk based framework to evaluate levees nationally. The potential risk of all levee projects and the consequences due to unsatisfactory performance that are the outcome of the assessments will be communicated to the general public and the owner of each levee system. Activities to be completed mid-2007 include a geospatial database model, GIS inventory of projects within a USACE program, and development and beta testing of a risk assessment methodology. Depending on funding, completing the database and assessments for levees in the USACE program is targeted to be completed in about five years. In the long-term, depending on funding, the database and assessments will be expanded to include all the nation's levees. In time, the database and assessment methodologies may substantially support the technical needs for levee certification analyses. This is not expected to be the circumstance for the next several years.

7. Points of Contact for Fact Sheet: Levee certification authorities and funding: Tammy L. Conforti, USACE IWR; levee certification technical requirements: Darryl W. Davis, USACE IWR. Both can be reached at 530-756-1104.