



FEMA



Living With Levee Systems: Information for Homeowners and Other Property Owners

Levee Systems: Risk Reduction, not Risk Elimination

The United States has thousands of miles of levee systems – usually earthen embankments – designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water and reduce the risk posed by temporary flooding. Many levee systems were first put in place by farmers to protect agricultural areas from frequent flooding and can date back more than 150 years. Other systems were designed to protect urban areas and were typically built to the higher standards used by the U.S. Army Corps of Engineers (USACE).

Levee systems are designed to provide a specific level of flood risk reduction. No levee system provides full protection from all flooding events, but they do reduce risk during certain flood events.

Levee systems can also be overtopped during larger flood events, with sometimes catastrophic results that often can be more significant than if the levee had not been built. Communities and levee owners thus have a duty to regularly service their levee to retain their designed level of flood risk reduction protection.

For the reasons above, the millions of people impacted by levee systems need to understand the flood risks they face and take proactive steps to address them.

FEMA's Role in Identifying Levee System-Related Flood Risks

The Federal Emergency Management Agency (FEMA) is the Federal agency responsible for managing the National Flood Insurance Program (NFIP). In this role, FEMA is charged with accurately identifying flood hazards and assessing flood risks, including hazards and risks in levee-impacted areas, while also providing appropriate flood hazard and risk information to communities nationwide. Since the 1970s, FEMA has provided hazard and risk information in the form of Flood Insurance Rate Maps (FIRMs).

FEMA coordinates closely with the U. S. Army Corps of Engineers (USACE) and other Federal, State and local professionals and technical partners as part of an ongoing effort to update the Nation's flood hazard and risk information and produce modernized versions of the FIRMs, called Digital Flood Insurance Rate Maps (DFIRMs). These DFIRMs show high-risk areas, referred to as a Special Flood Hazard Areas (SFHAs), where there is a 1-percent chance of flooding in any given year. The DFIRMs also show low-and moderate-risk areas, where there is less than a 1-percent-annual-chance of flooding.

Levee Systems

For more information on levee systems, please visit the **Homeowners and General Public page** at http://www.fema.gov/plan/prevent/fhm/lv_home.shtm.

Flood Insurance

For more information on flood insurance for your home or business, please visit the **Flood Smart Web site** at <http://www.floodsmart.gov/floodsmart/pages/index.jsp>.

Flood Hazard Mapping

For more information on flood hazard mapping, please visit the **Information for Homeowners page** at http://www.fema.gov/plan/prevent/fhm/hm_main.shtm.



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This close coordination allows FEMA to accurately reflect the flood hazard and risk in levee-impacted areas shown on DFIRMS, but FEMA does not certify levee systems or assess levee system performance. It is the responsibility of the community or other party seeking recognition of a levee system as accredited on a DFIRM to provide certified design data that meet the minimum regulatory requirements. FEMA reviews such certified data for the sole purpose of establishing appropriate risk zone determinations on DFIRMS, which does not constitute a determination by FEMA as to how a levee system will perform during a flood event.

Assessing and mapping Risks in Levee-Impacted Areas: A Complex Process

Assessing flood risk for levee-impacted areas is complex. Flood elevations and the ability of levee systems to contain floodwaters are among the many factors that must be taken into account. The NFIP has criteria for accreditation of levee systems and levee owners must provide certain data and documentation to FEMA to show the levee system meets the NFIP criteria. Levee system owners can find a checklist to assist them in meeting the criteria in the FEMA Library (<http://www.fema.gov/library/viewRecord.do?id=2517>)

If a levee system does meet the NFIP criteria, the affected DFIRM panels show the impacted area landward of the levee system as a moderate-risk. If a levee system does not meet the NFIP criteria, the DFIRM shows the levee-impacted area as a high-risk SFHA.

Levee System Accreditation and Flood Insurance

The chart below shows how FEMA depicts the levee-impacted areas on DFIRMS and the flood insurance requirements and options that apply to structures in levee-impacted areas.

IF THE LEVEE SYSTEM IS...	THE FEMA FLOOD MAP WILL SHOW THIS FLOOD RISK AS...	AND THESE FLOOD INSURANCE REQUIREMENTS AND OPTIONS WILL APPLY
Not Accredited (Does Not Meet NFIP Criteria)	High Flood Risk Levee-impacted areas shown as being in an SFHA (labeled as Zones A, AE, AH, AO) on DFIRM	Flood insurance is required as a condition of any mortgage that is federally backed, regulated, or insured. Property owners should be aware that insurance rates may rise to reflect higher flood risk in these areas.
Accredited (Meets NFIP Criteria)	Moderate or Low Flood Risk Levee-impacted areas shown as being in Zone X or Zone X (shaded) on DFIRM	The mandatory flood insurance purchase requirements of the NFIP do not apply. Flood insurance is <u>strongly</u> recommended. Lower-cost Preferred Risk Policies (PRPs) are available for eligible structures.
De-Accredited (No Longer Meets NFIP Criteria)	High Flood Risk Levee-impacted areas shown as being in an SFHA (labeled as Zones A, AE, AH, AO) on DFIRM	Flood insurance is required in high-risk areas as a condition of any mortgage that is federally backed, regulated, or insured. Grandfathering may save property owners money. Buildings covered by flood insurance before the effective date of new DFIRM can be grandfathered at the current flood insurance risk zone designation, as long as there is no lapse in coverage. This coverage can be transferred.
Provisionally Accredited (Temporary Designation; Awaiting Additional Data and Documentation from Levee System Owner)	Moderate Flood Risk Levee-impacted areas shown as being behind a Provisionally Accredited Levee system (labeled as Zone X (shaded) pending accreditation of the levee system)	The mandatory flood insurance purchase requirements of the NFIP do not apply. Flood insurance is <u>strongly</u> recommended. Lower-cost PRPs are available for eligible structures.

